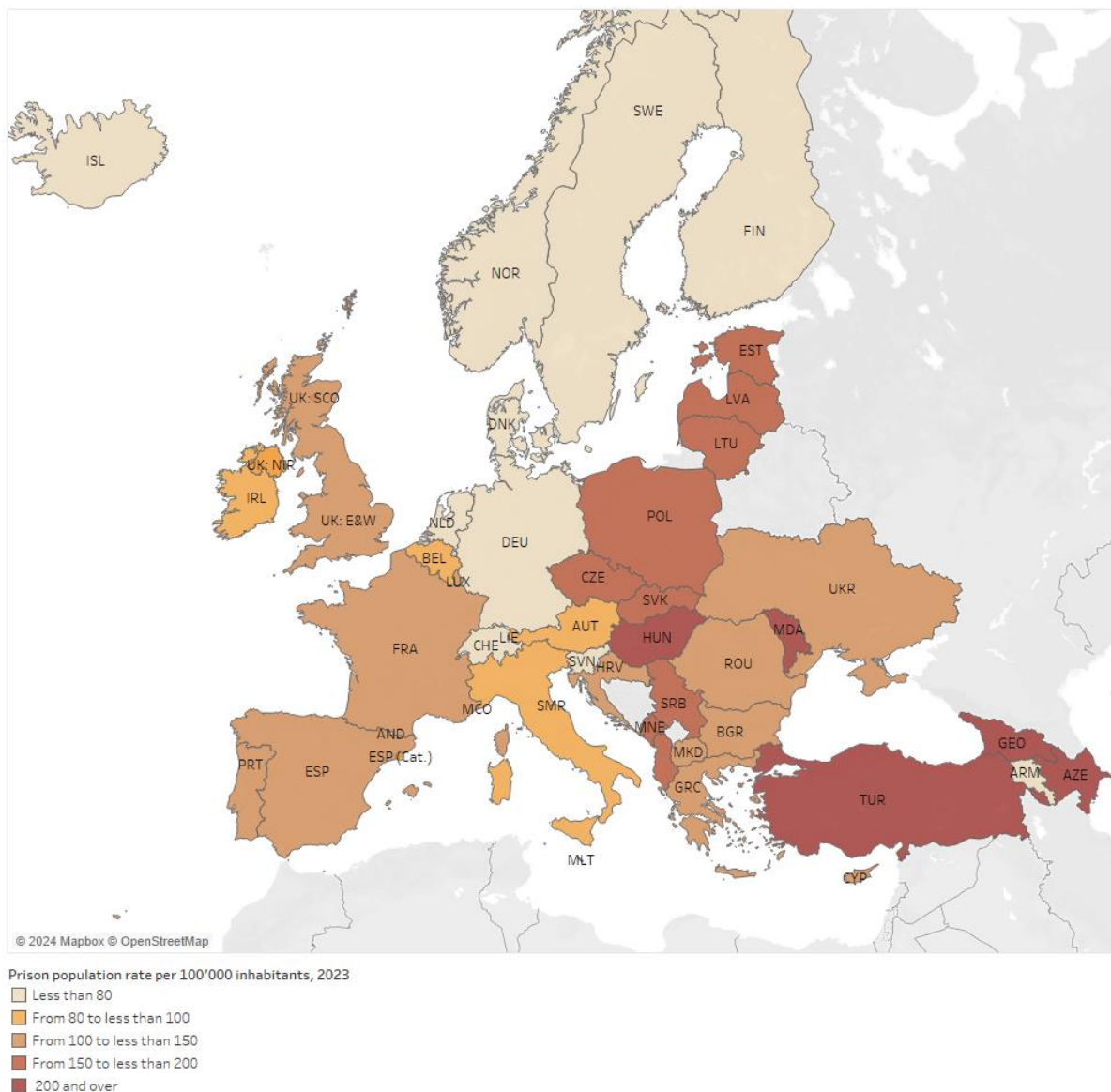


# Prisons and Prisoners in Europe 2023: Key Findings of the SPACE I survey

Marcelo F. Aebi & Edoardo Cocco



**Map 1.** Prison population rates (number of inmates per 100,000 inhabitants) on 31 January 2023 (N=48)

### Suggested citation [APA Style 7<sup>th</sup> edition]

Aebi, M. F. & Cocco, E. (2024). *Prisons and Prisoners in Europe 2023: Key Findings of the SPACE I report*. Series UNILCRIM 2024/1. Council of Europe and University of Lausanne.

### Disclaimers

The responsibility for the content of this report lies with the authors. The contents of this publication do not necessarily reflect the views or policies of the Council of Europe, nor do they imply any endorsement. The Council of Europe is not responsible for any subsequent use that may be made of the information contained herein. The designations employed and the presentation of material in this publication do not imply the expression of any opinion on the part of the Council of Europe concerning the legal status of any country, territory or city or its authorities, or concerning the delimitation of its frontiers or boundaries.

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made. The authors would appreciate a copy of any publication that uses this report as a source.

**Contact:** Marcelo. Aebi@unil.ch

Copyright © 2024, Council of Europe & University of Lausanne.

Series UNILCRIM - ISSN: 2673-1983



## 1. Introduction

This report summarizes key findings from the 2023 Council of Europe Annual Penal Statistics on Prison Populations, better known as SPACE I, an acronym derived from its French name, *Statistiques Pénales Annuelles du Conseil de l'Europe*. A total of 48 out of the 51 prison administrations (PAs) across the 46 Council of Europe member states responded to the 2023 SPACE I questionnaire, contributing to this year's survey. This signifies a 94% participation rate. The sole administrations that refrained from replying were those of Bosnia and Herzegovina, specifically the State PA, the Federation of Bosnia and Herzegovina PA, and the Republika Srpska PA.

Not all administrations responded to every question, and, as far as the longitudinal analyses in this report are concerned, not all administrations have responded every year to the SPACE I questionnaire. Consequently, when interpreting the figures in this report or comparing them with those of previous years, readers must consider the total number (N) of PAs included in each figure, as indicated in its title<sup>1</sup>. For example, the European average for the same indicator will vary from one figure to another when the number of PAs included is not the same. Additionally, the Russian Federation's exclusion from the Council of Europe on 16 March 2022 results in its absence from the SPACE data collection, impacting trend analyses. As a reminder, on 31 January 2021—the reference date for stock figures in the 2021 SPACE I report—Europe housed 1,414,172 inmates, one third of which (478,714 inmates, or 34% of the total) were accommodated in Russian penal institutions. Furthermore, approximately 14% of the total budget expended by European PAs in 2020 was accounted for by Russia. Thus, to maintain consistency in trend analyses, we also excluded the Russian Federation from the longitudinal analyses presented herein, recalculating all European average and median rates taken from prior reports.

The figures featured in this report use ratios, percentages, and rates per 100,000 inhabitants, rather than relying solely on absolute numbers. These metrics are influenced not only by fluctuations in inmate counts but also by natural population changes. Researchers from the Wittgenstein Centre for Demography and Global Human Capital have summarized the European population trends from 2000 to 2020 as follows: “Europe remains divided by long-term population trends. This division mostly follows the past geopolitical cleavage between Europe's East and West. Countries in the comparatively rich regions—the West, South, and North—continue to experience rising population, due to a combination of minor natural population increase and higher level of immigration than emigration. In contrast, almost all countries in Central, South-Eastern, and Eastern Europe saw substantial population declines, due to a combined effect of natural population decrease and emigration.”<sup>2</sup> Thus, while a PA's inmate count may remain constant over time, its incarceration rate will fluctuate based on the country's natural population changes. Similarly, prison data for Azerbaijan, Cyprus, Georgia, Moldova, and Ukraine exclude territories that are not under government control; however, their general population figures, which are used as a proxy for the population at risk of incarceration when calculating rates per 100,000 inhabitants, may not accurately account for this exclusion.

Rates and percentages are presented as rounded numbers unless they fall below 10. A few exceptions to that rule were introduced when we considered that the addition or subtraction of decimals could help the comprehension of the indicator under study. The original data, with one decimal point, can be consulted in Tables 3 and 4 of Section 7. In our analysis, we employ the arithmetic mean (average) and the median as indicators of the central tendencies observed in Europe. Our focus is primarily on countries with populations exceeding 1,000,000 when highlighting significant deviations from these indicators. In that perspective, we have distinguished the description of the data from their plausible interpretations by putting the latter in bullet points [•]. We did the same for some specific methodological issues that can help readers when interpreting the data. For a more comprehensive explanation, please refer to the Methodology section at the end of this report.

---

<sup>1</sup> The numerical discrepancy between the number of PAs indicated in the title of each Figure and the actual number of bars within the Figure arises from the inclusion of bars representing the European average, median, and the total for Spain. The latter combines data from both the State PA and the Catalanian PA. These additional bars are visually distinguished by being rendered in grey (for average and median values) and in a more subdued colour (for the Spanish total). For instance, while Figure 1 consists of 51 bars, the “N” value refers specifically to the 48 unique PAs represented within it.

<sup>2</sup> Zeman, K. & Sobotka, T. (2020). Contribution of migration and natural population change to long-term population growth in Europe 2020-2040. In *European Demographic data sheet 2020*. Wittgenstein Centre for Demography and Global Human Capital. <https://eds2020.populationeurope.org/en/>

## 2. Stock indicators: Prisons and Prisoners on 31 January 2023

As of 31 January 2023, there were 1,036,680 inmates in the 48 PAs of the Council of Europe member states that participated in the SPACE I survey. When the number of inmates in each member state is put in relation to its number of inhabitants, it leads to an average European prison population rate of 124 inmates per 100,000 inhabitants, while the median figure is lower, at 107 inmates per 100,000 inhabitants. This is due to a positively skewed distribution of national prison population rates that can be observed in Figure 1. Approximately two-thirds of the administrations reported comparatively low or median prison population rates (less than 124 inmates per 100,000 population); nevertheless, a small number of administrations display high rates—see the right side of Figure 1—resulting in an inflated average European prison population rate.

Significant variations in prison population rates can be observed across regions. Generally, countries in Eastern Europe and the Caucasus region, including Azerbaijan, Georgia, and Türkiye, exhibit considerably elevated prison population rates compared to their Western and Northern European counterparts. On the other end of the spectrum, countries such as Germany, the Netherlands, Slovenia, Switzerland, and the Nordic nations report remarkably low prison population rates.

- Since the 1980s, Scandinavian countries have been cited as examples of effective prison policy, with Finland often highlighted as a model for reducing prison populations.<sup>3</sup> Evidence shows that countries such as Germany, the Netherlands, and Switzerland have also achieved comparable success and maintain low prison population rates since the beginning of the 21<sup>st</sup> century, even though they do not share the Nordic culture, apply dissimilar prison policies, and are located in a different geographical context, which confronts them with different challenges in terms of cross-border movements of goods and persons. These countries can also provide useful insights on effective penal policies.

In Map 1, the spatial distribution of prison population rates is divided into five categories, ranging from less than 80 inmates to 200 or more inmates per 100,000 inhabitants. The highest and lowest rates are those mentioned above, but the Map also shows that several nations exhibit prison population rates inconsistent with regional trends. Hence, despite its geographical location in Central Europe, Hungary reported rates exceeding those of its geographical counterparts. Large deviations in both directions are also observed in the Balkan region, where the prison rates of Albania and Montenegro are relatively high compared to their regional peers, while those of Slovenia are among the lowest in Europe. Armenia clearly diverges from the high incarceration rates typically observed in the Caucasus, instead aligning with countries recording the lowest prison population rates. Armenia's downward shift was first observed in 2019 and can be attributed to an amnesty pronounced in 2018 to commemorate the centennial of the Republic and, indirectly, to the impact of that year's Velvet Revolution.

Similarly, certain nations with distinct regional administrations displayed internal variations in prison population rates. Spain, for instance, reported a higher rate in its State Administration compared to Catalonia. Within the United Kingdom, Scotland and England and Wales exhibited similar rates, significantly higher than that of Northern Ireland. In fact, the prison population of Northern Ireland is close to that of the Republic of Ireland.

- Research shows that a wide variety of factors can influence prison population rates, that these factors are interconnected, and that their influences are complex and multi-layered. Obviously, countries with harsher penalties—such as mandatory minimum sentences, long sentences for certain crimes, or few alternatives to incarceration—should have higher incarceration rates. Conversely, in systems where judges have more flexibility in sentencing, they might more frequently choose options like probation or community service instead of prison sentences. Prison population rates are also influenced by law enforcement practices, such as ethnic profiling, the extent to which resources are focused on certain types of crimes or certain areas, and "tough on crime" policies, which typically lead to increased incarceration rates. Similarly, cultural attitudes towards crime and punishment and political systems can also play a role. For instance, autocratic societies tend to have higher incarceration rates than democratic societies. In that vein, Eastern European democracies inherited the high prison population rates that were typical of the previous Soviet penal system in the 1990s and, although they have decisively shifted directions, the rates remain relatively high in some of them. Finally, prison population rates may also be affected by socioeconomic factors—poverty, inequality, levels of education, rates of substance abuse, age structure, and gender ratio of the population, for instance—that have an impact on the structure of opportunities to commit crimes, which in turn affects the prison population rate.

---

<sup>3</sup> Pratt, J. (2008). Scandinavian exceptionalism in an era of penal excess. Part I: The nature and roots of Scandinavian exceptionalism. *The British journal of criminology*, 48(2), 119-137.

Understanding prison population rates in any given country requires a nuanced and comprehensive analysis of these and other potential factors. As only a few of them can be considered in this report, readers must proceed cautiously when analysing the classifications of countries that stem from the following figures, as well as when proposing interpretations of their potential causes and consequences.

## 2.1. Characteristics of the inmates (detainees and sentenced prisoners) held in European penal institutions

### Age and imprisonment

The average age of inmates in European penal institutions as of 31 January 2023 is 38 years (see Figure 2.1 and SPACE I, Table 6) in the 40 PAs that provided this information. In countries with over one million inhabitants, the average age of the prison population ranges from 33 to 50 years, and in two thirds of them the average age of inmates ranges from 33 to 39 years old. The lowest average ages are observed in Bulgaria (33 years), Sweden (34), France and Denmark (35), while a few prison administrations present an average age of the prison population exceeding 40 years old, with the highest being Serbia (50), Georgia (44), Italy (43), Portugal and Spain (41), Albania, Czechia, and Estonia (40).

- Criminologists have established a consistent relation between age and crime, with criminal behaviour generally peaking in late adolescence and early adulthood and declining after 25 years of age. Most of the population engage in antisocial, deviant, or minor offences during adolescence, and this is reflected in self-reported delinquency surveys that show that the highest number of deviant behaviours is reported by those aged 16 and 17 years of age. For the subgroup of offenders engaged in serious, predominantly violent crimes, the peak occurs later, during the early twenties. This pattern, which can also be observed in police statistics, is known as the age-crime curve.<sup>4</sup> Notably, certain categories of offenders deviate from this pattern. For instance, white-collar criminals and leaders of organized crime networks, such as those engaged in narcotraffic and mafia-type organizations, are typically older. In contrast, the age distribution of cybercriminals remains under ongoing investigation.

The average age of inmates is higher than the peak age of criminal activity because prison statistics are an inaccurate indicator of crime, which means that prison populations do not represent the true population of offenders. Many crimes go undetected, unreported, or unsolved; the criminal justice system may be subject to biases leading to the under- or overrepresentation of specific population categories or types of crimes and their respective offenders; and trends in prison statistics are heavily affected by changes in legislation, criminal policies, and sentencing. Yet the COVID-19 pandemic-related lockdowns in 2020 showed that trends in prison statistics are not completely independent of crime trends, because the decrease in offline crimes that took place during the lockdowns<sup>5</sup> was mirrored immediately by a decrease in the number of inmates.<sup>6</sup> This is because prison populations are composed of sentenced prisoners—those who have been apprehended, convicted, and incarcerated—but also by detainees on remand, who are in fact suspects awaiting decisions from prosecutors about their detention or court judgments. A crime decrease entails a decrease in the number of offenders apprehended by the police and placed in pre-trial detention, which in turn leads to a decrease in the overall prison population as inmates continue to be released when their sentences end. This is precisely what happened during 2020, the first year of the COVID-19 pandemic. Apart from that, cross-sectional research in Europe has consistently shown a correlation between prison rates and homicide rates, which means that countries with the highest homicide rates tend to also be among those with the highest prison population rates, and vice versa.<sup>7</sup>

Beyond the aforementioned factors, the average age of the prison population is influenced by the fact that imprisonment is the last resort of the criminal justice system, reserved in democratic states for the most serious crimes, which entail long sentences. Furthermore, that average age is affected by the presence of older inmates, such as recidivists and offenders involved in white-collar crimes, organized crime, or drug-trafficking offences. Therefore, the average age of

<sup>4</sup> Rocque, M., Posick, C., & Hoyle, J. (2016). Age and crime. In Jennings, W. G. (Ed.) *The encyclopedia of crime and punishment*. John Wiley & Sons.

<sup>5</sup> Nivette, A. E. et al. (2021). A global analysis of the impact of COVID-19 stay-at-home restrictions on crime. *Nature Human Behaviour*, 5(7), 868-877.

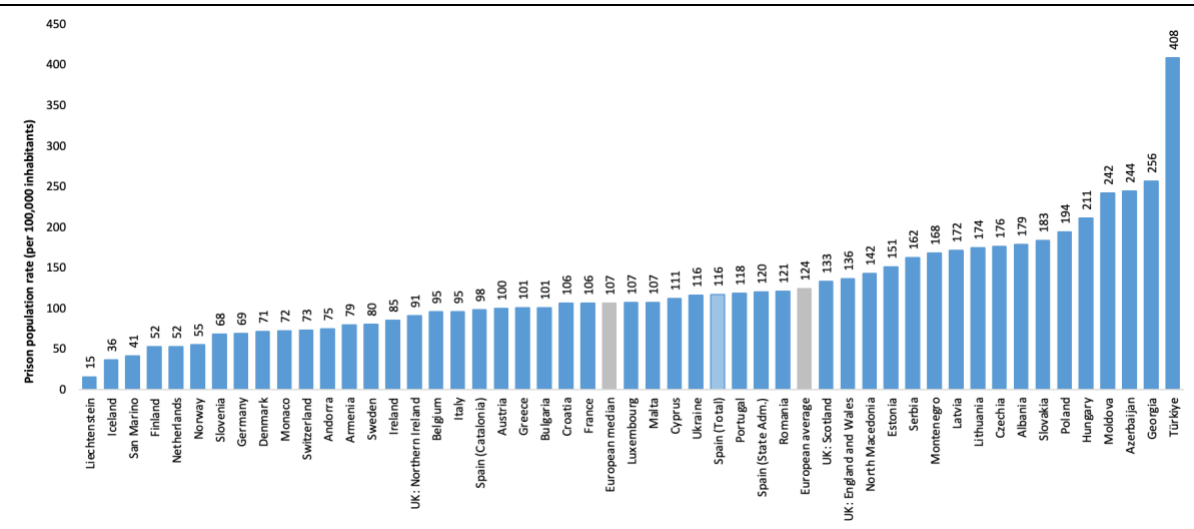
<sup>6</sup> Aebi, M. F. & Tiago, M. M. (2020a). *Prisons and Prisoners in Europe in Pandemic Times: An evaluation of the short-term impact of the COVID-19 on prison populations*. Series UNILCRIM 2020/3. Council of Europe and University of Lausanne.

Aebi, M. F. & Tiago, M. M. (2020b). *Prisons and Prisoners in Europe in Pandemic Times: An evaluation of the medium-term impact of the COVID-19 on prison populations*. Series UNILCRIM 2020/4. Council of Europe and University of Lausanne.

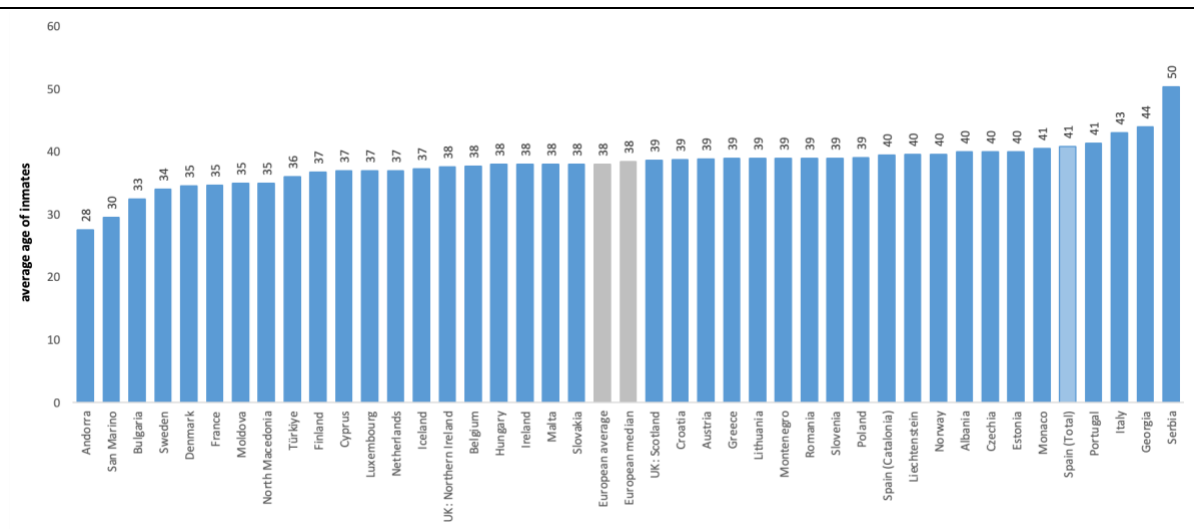
<sup>7</sup> Lappi-Seppälä, T. (2011). Explaining imprisonment in Europe. *European Journal of Criminology*, 8(4), 303-328.

Aebi, M. F., Linde, A., & Delgrande, N. (2015). Is There a Relationship Between Imprisonment and Crime in Western Europe? *European Journal on Criminal Policy and Research*, 21(3), 425-446.

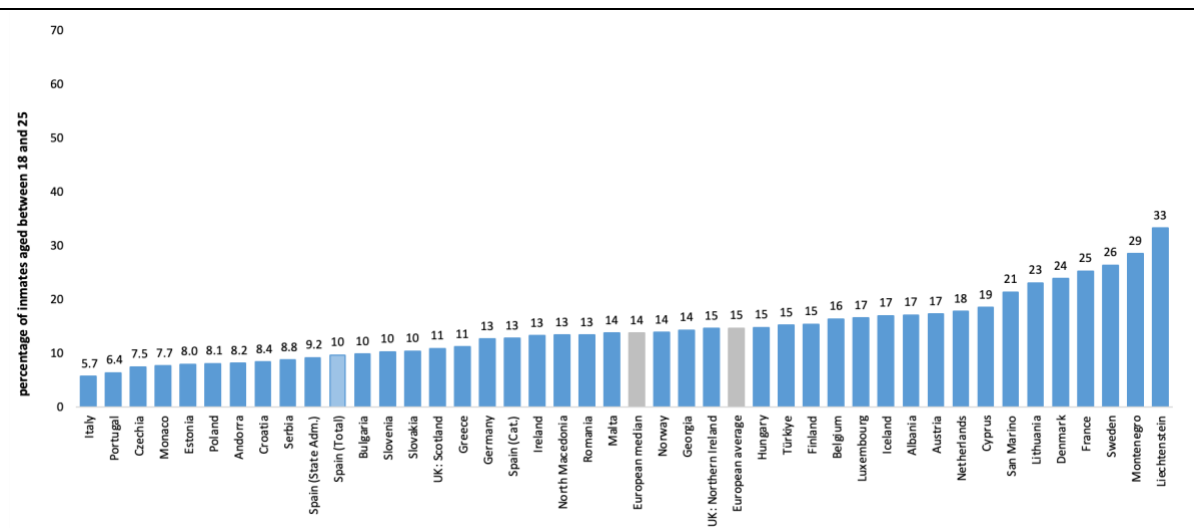
**Figure 1. Prison population rates (inmates per 100,000 inhabitants) on 31 January 2023 (N=48 PA)**



**Figure 2.1. Average age of inmates on 31 January 2023 (N=40 PA)**



**Figure 2.2. Percentage of inmates aged between 18 and 25 in the prison population on 31 January 2023 (N=41 PA)**





sentenced prisoners is higher than that of the overall prison population, which encompasses a large proportion of younger individuals found among remand detainees awaiting judicial proceedings for less severe or first-time offences.

In terms of the distribution of the European prison population by age groups (see SPACE I, Table 6) and taking the median as a reference, 14% of inmates are aged 18 to 25 years (see Figure 2.2), 15% are aged 50 to 64 (see Figure 2.4), 3% are aged 65 or more (see Figure 2.5), and 68% are aged 26 to 49 (see Figure 2.3). In countries with over one million inhabitants, the highest percentages of inmates aged 50 to 64 are found in Italy (24.1%), Slovakia (23.9%), North Macedonia (21%), and Portugal (20.9%). Meanwhile, the highest percentages of inmates aged 65 or over are found in Croatia (10%), Italy and Lithuania (5% each), and Slovenia (4.8%). Notably, the groups of countries with the highest percentage of prisoners aged 50 to 64 and those aged 65 or over do not completely overlap.

- A plausible explanation is that the percentage of inmates aged 50 or over is related to the general structure of the prison population, while that of inmates aged 65 or over is linked to the presence of specific types of offenders.

This hypothesis is supported by the fact that Italy and Portugal are among the countries with the highest percentage of inmates aged 50 or over and also among those with the highest average age of the prison population. Furthermore, these countries are among those presenting long average lengths of detention (see Figure 13). The average length of detention in Europe is around 12 months (the median is at 10 months), but in Italy it is roughly 18 months; and in Portugal it is around 30 months, which is in fact the maximum length of detention found in Europe.

Conversely, among inmates aged 65 or over, it is expected to find an overrepresentation of inmates serving indeterminate measures in the countries that foresee this kind of sanction, as well as of those serving life sentences—which in Europe does not mean perpetuity, because life imprisonment has a maximum duration that varies from country to country—and prisoners with the lengthiest sentences, such as those imposed on multi-recidivists or individuals convicted of violent offences, organized crime, or drug trafficking. These are specific groups whose age structure differs from that of the general prison population. For example, in Italy, a significant portion of prisoners aged 65 or more are former Mafia bosses sentenced to life imprisonment.

Elderly inmates face significant challenges, including social isolation and physical and mental health problems that require specialized medical care. Data show that the percentage of this category of inmates remains low in Europe (3%); however, there is a consensus that prison populations are aging. This trend can be attributed to three main factors: the aging of the European general population, an increase in the average length of imprisonment, and an increase in the number of older individuals being incarcerated. The available data do not allow us to test the third factor. The second factor has been corroborated using SPACE I data, which showed an increase in the average length of imprisonment from 1983 to 2010<sup>8</sup>. Finally, life expectancy has experienced a significant increase in Europe since the 1950s and 1960s, primarily due to a combination of factors such as enhanced healthcare systems, improved nutrition, advances in medical technology, and overall progress in living conditions. This upward trend is also evident during the period covered by the SPACE I series, which began in 1983. For instance, in round numbers, life expectancy in Czechia rose from 71 years in 1983 to 78 in 2021, in France and Italy from 75 years in 1983 to 83 in 2021, in Lithuania from 71 to 74 years, in Poland from 71 to 77 years, in Spain from 76 to 83, in Sweden from 77 to 83 and in the UK from 74 to 81 years.<sup>9</sup> In this context, the increase in life expectancy in Europe should, at least indirectly, lead to an overall aging of the European prison populations.

Within the SPACE I project, data collection on the percentages of inmates aged more than 50 and 65 years old began in 2020. The aim is to monitor the aging of prison populations in Europe. However, reliable statistical analyses will not be possible until more years of data have been collected. This year, data collection expanded to include other age categories, resulting in a more accurate depiction of the age distribution within the European prison population (see Figures 2.1 to 2.5 and SPACE I, Table 6).

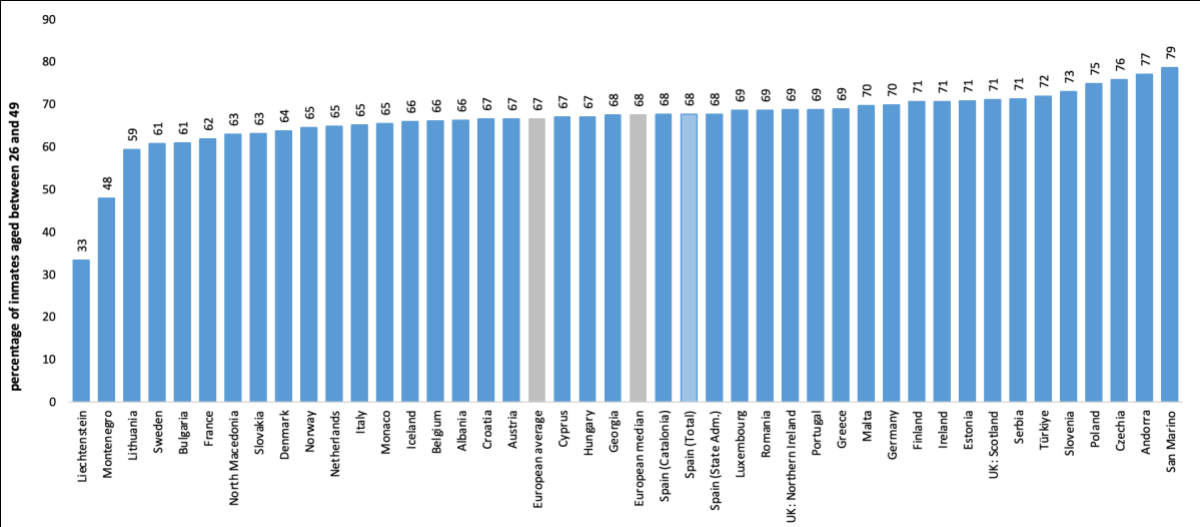
## Gender and Imprisonment

In European penal institutions, the overwhelming majority of inmates are men, representing approximately 95% of the total prison population. Conversely, women account for a mere 5% of inmates (see Figure 3 and SPACE I, Table 7a). Although variations exist across PAs, Figure 3 illustrates the consistent underrepresentation of women in penal institutions throughout Europe. Among countries with over one million inhabitants, the lowest

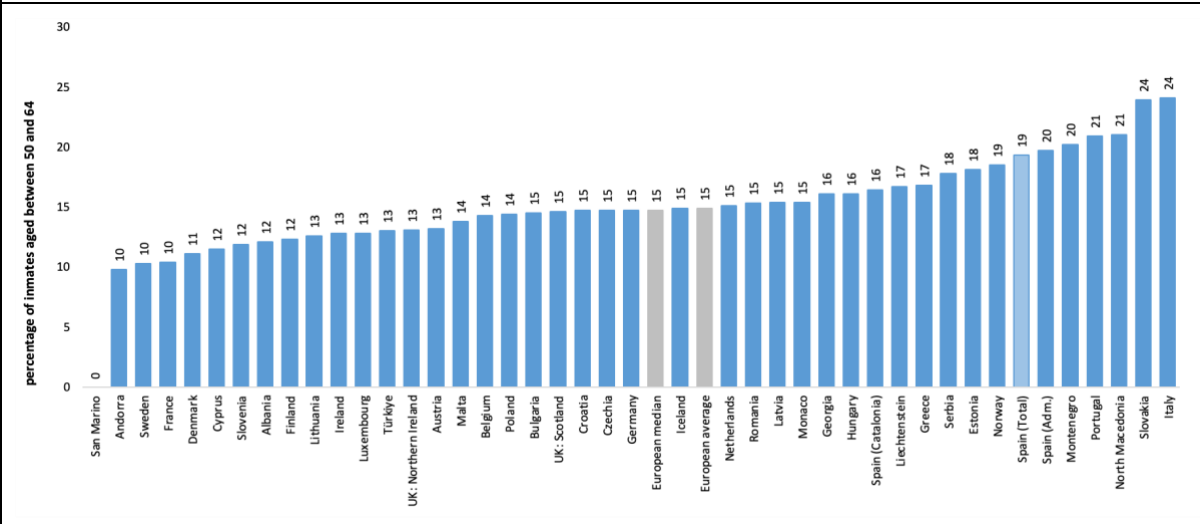
<sup>8</sup> Aebi, M. F., Linde, A., & Delgrande, N. (2015). Is There a Relationship Between Imprisonment and Crime in Western Europe? *European Journal on Criminal Policy and Research*, 21(3), 425-446.

<sup>9</sup> See <https://ourworldindata.org/life-expectancy>.

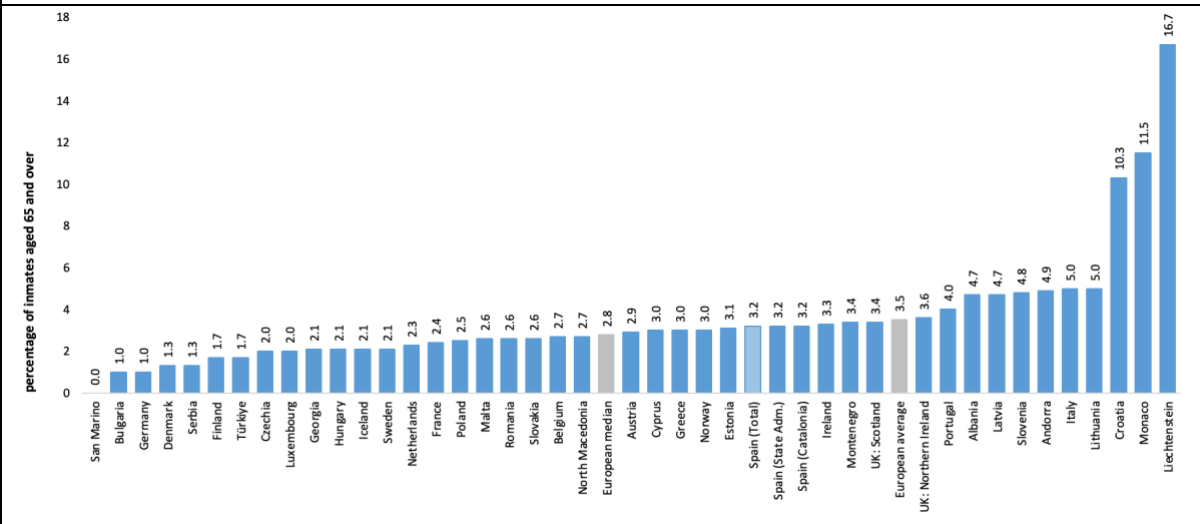
**Figure 2.3.** Percentage of inmates aged between 26 and 49 in the prison population on 31 January 2023 (N=41 PA)



**Figure 2.4.** Percentage of inmates aged between 50 and 64 in the prison population on 31 January 2023 (N=42 PA)



**Figure 2.5.** Percentage of inmates aged 65 and over in the prison population on 31 January 2023 (N=42 PA)





percentages of female inmates (below 3%) are observed in Albania (1.3%), Croatia (1.9%), Armenia (2.6%), and Azerbaijan (2.9%). In contrast, the highest percentages (exceeding 7.5%) are found in Cyprus (9.2%), Czechia (8.5%), Finland and Latvia (7.7%).

- Criminologists have identified a persistent relationship between gender and imprisonment on a global scale. Men are more likely to be incarcerated than women, comprising approximately 93% of the worldwide imprisoned population.<sup>10</sup> This discrepancy can be attributed to various factors, including differences in criminal behaviour, gender biases within the criminal justice system, societal expectations, gender roles, and neurobiological distinctions between men and women.

Empirical evidence indicates that men are considerably more likely to engage in violent behaviours, a primary category of offences resulting in imprisonment in Europe. This observation can be partially attributed to societal expectations and gender roles, which play a significant role in shaping the types of crimes men and women commonly commit and how they are perceived and treated within the criminal justice system. It is also a consequence of neurobiological factors such as the earlier development of the prefrontal cortex in women—approximately two years ahead of men—which plays a crucial role in regulating violent impulses.<sup>11</sup> This relation exemplifies the intricate interplay between biological and environmental factors in shaping human behaviour.

Research also reveals gender disparities in sentencing, with women generally receiving more lenient sentences than men for similar offences.<sup>12</sup> One example of this is the courts' consideration of women's primary caregiver status for their children, which often results in the imposition of community-based sanctions and measures rather than incarceration. Data suggests that this phenomenon could be taking place in Europe, where the percentage of women serving community-based sanctions and measures is usually more than twice the percentage of those incarcerated. For example, according to the last year's SPACE reports, as of 31 January 2022, women represented on average 11.9% of probationers in Europe, but only 5.1% of the inmates.<sup>13</sup>

## Citizenship and Imprisonment

On average, 27% of inmates in European prisons are foreigners; however, this percentage varies significantly across PAs, as depicted in Figure 4.1. In Eastern European PAs, the proportion is typically lower than 5%, while in Central and Western European ones, it is at least 10% and, in some PAs, it exceeds 40% (see Figure 4.1 and SPACE I, Table 12). Among the latter are Switzerland (71%), Greece (57%), Cyprus (55%), Austria (51%), the PA of Catalonia (49%), Belgium (42%), and six PAs in countries with populations under one million. The lowest percentages of foreign inmates (below 2%) are observed in Romania (1.1%), Moldova (1.5%), and Azerbaijan (1.9%). This pattern overlaps with that of the natural movement of European populations since the 2000s—rising populations in the West, South, and North and decreasing populations in the Centre, South-East, and East of Europe—quoted in the Introduction above.

This uneven distribution is reflected in the European median (see Figure 4.1), which shows that half of the PAs have fewer than 16% foreign inmates, while the other half have more than that. This 16% median figure corresponds to slightly less than two-thirds of the European average (27%), highlighting the considerable disparities in the percentages of foreign inmates across European prison systems. In this context, it is important to consider the various agreements that interlink EU countries, allowing for open borders and free movement. These arrangements not only enable internal migration and trade, fostering regional economic growth, but they may also inadvertently facilitate cross-border criminal activities, thus increasing the likelihood of foreign nationals being imprisoned.

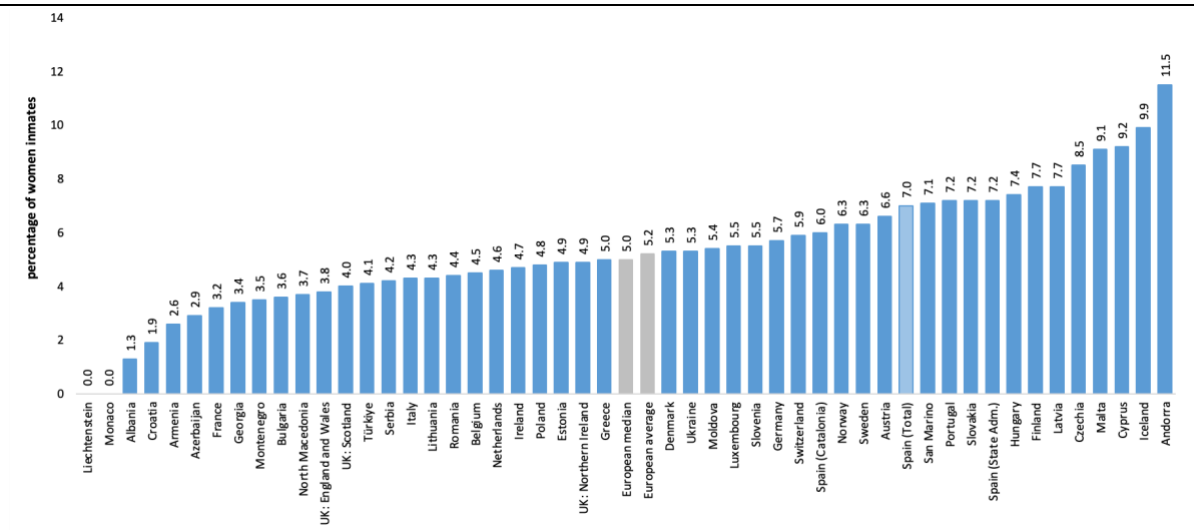
<sup>10</sup> UNODC (2022). Nearly twelve million people imprisoned globally, nearly one-third unsentenced, with prisons overcrowded in half of all countries. *Data matters*, 1. Available at [https://www.unodc.org/documents/data-and-analysis/statistics/DataMatters1\\_prison.pdf](https://www.unodc.org/documents/data-and-analysis/statistics/DataMatters1_prison.pdf).

<sup>11</sup> Blakemore, S.-J. (2018). *Inventing Ourselves: The Secret Life of the Teenage Brain*. Doubleday.

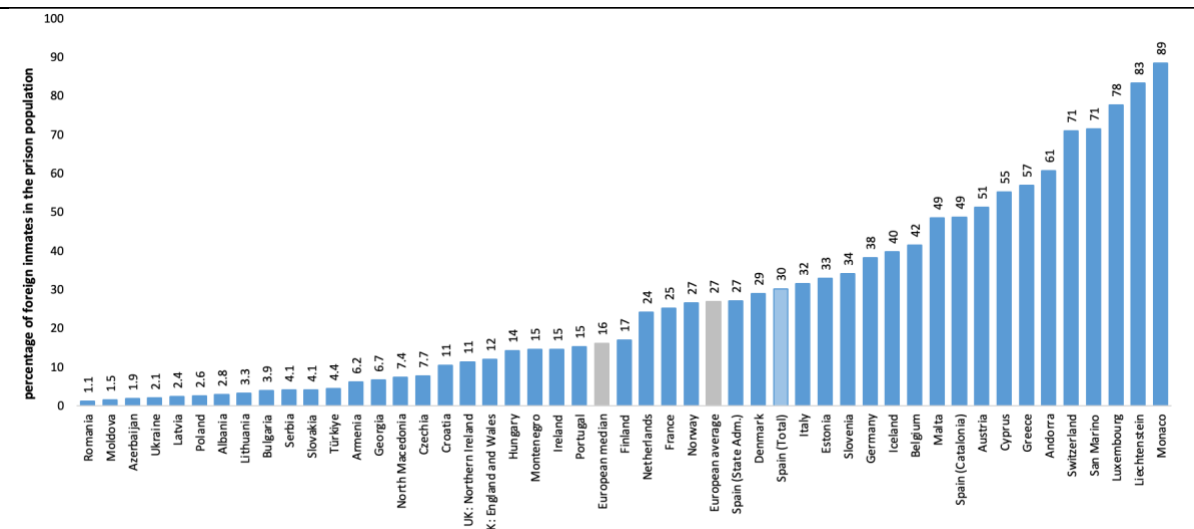
<sup>12</sup> Bontrager, S., Barrick, K., & Stupi, E. (2013). Gender and sentencing: A meta-analysis of contemporary research. *The Journal of Gender, Race & Justice*, 16(2), 349-372. Readers must bear in mind that this meta-analysis is based only on research conducted in the United States and that robust empirical research on this topic is rare in Europe. A noteworthy exception is Páez-Mérida, A. (2022). Estado de la cuestión del estudio de la influencia del género en la toma de decisiones judiciales. *Revista Española De Investigación Criminológica*, 19(1), 1–25.

<sup>13</sup> Aebi, M. F., Cocco, E. & Hashimoto, Y. Z. (2023). *Probation and Prisons in Europe 2022: Key Findings of the SPACE reports*. Series UNILCRIM 2023/2. Council of Europe and University of Lausanne. See Figure 7.

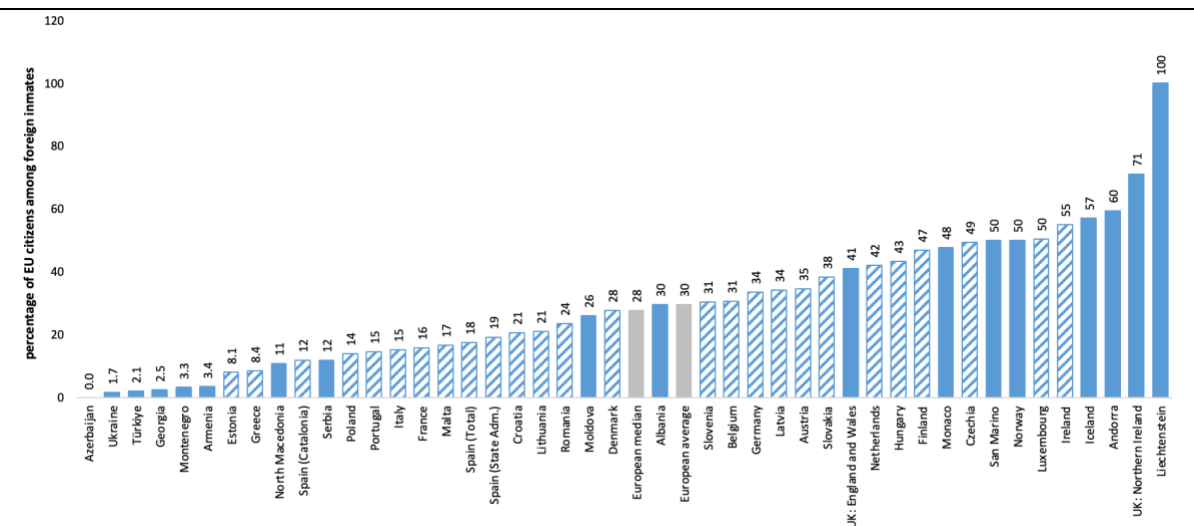
**Figure 3.** Percentage of women inmates in the prison population on 31 January 2023 (N=48 PA)



**Figure 4.1.** Percentage of foreign inmates in the prison population on 31 January 2023 (N=46 PA)



**Figure 4.2.** Percentage of EU citizens among foreign inmates on 31 January 2023 (N=43 PA, of which 25 EU)



Note to Figure 4.2: PAs of EU countries are presented in blue stripes.

On average, 30% of foreign inmates hold citizenship from a European Union member state, as depicted in Figure 4.2. This overall percentage is the same as last year<sup>14</sup>. For countries with over one million inhabitants, year-on-year fluctuations in the *median* rates of several key stock and flow indicators are provided in Table 2. However, readers should take into account that these variations are only applicable to PAs that have submitted data for both years under consideration. For instance, the *median* value for European PAs, based on the 43 PAs that provided data for 2023, indicates that 28% of foreign inmates are EU citizens, as shown in Figure 4.2. However, when we base this statistic on the 33 PAs with at least one million inhabitants that provided data both for 2022 and 2023, this proportion decreases to 23.5%, which is lower compared to the 26.1% recorded in 2022.

Finally, Figure 4.3 shows that 13 PAs collect data on the resident status of the foreigners held in their prisons. Among them, the proportion of those who have a legal resident status range from none to all, with an average of roughly one third.

- Many controversies on this topic stem from a confusion between the overarching category of foreigners with the specific subcategory on immigrants. *Foreigners* are all those persons who do not have the citizenship of the country in which they are incarcerated. Among them, there are some who have a legal status of permanent residence in that country. These are the *immigrants*, characterised by the fact that they moved to that country with the intention of establishing their long-term residence there, forming new communities, or joining existing ones. Yet the category of foreign inmates encompasses people in various other situations, such as tourists, individuals in transit or temporarily in the country for work or private affairs, as well as undocumented migrants, asylum seekers, and offenders involved in transnational crime. Crime and criminal justice statistics—including prison statistics—do not make that distinction and use only the overall category of foreigners. Still, any explanation of the overrepresentation of foreign citizens among inmates observed in several Western countries must take into account the distinction introduced above.<sup>15</sup> Otherwise, there is a risk of engaging in simplistic, and often demagogic explanations.

To complicate things, some of the European research on this topic apply the theoretical frameworks developed in the United States in the first half of the 20<sup>th</sup> century, which were crafted having in mind the *immigrants* established under the umbrella of a series of policies aimed at increasing the population of that country. This kind of research on *immigration and crime* suggests that language barriers, unfamiliarity with local laws, the lack of a network of family and friends, and socio-economic factors, such as a limited access to resources, are challenges faced by all non-nationals that might increase the risk of entering in contact with the criminal justice system. In addition, discrimination and bias in the criminal justice system might contribute to higher arrest rates for foreign nationals compared to local citizens. These challenges exist in Europe for citizens of the European Union (EU) who, after filling a series of requirements, can establish themselves in other EU countries, as well as for the few citizens of third countries that succeed in obtaining a permit of residence.

For foreigners who are not in that situation, integration is even more challenging. Undocumented foreigners or those with an irregular legal status may want to remain on the continent, but do not have access to legal jobs and housing. These persons face a higher risk of detention due to their precarious situation and to the fact that in some countries illegal immigration, also known as irregular entry or stay, is considered an offence, and may result in sanctions or measures. In fact, some countries (see SPACE I, Table 2.1). Furthermore—and this is a key difference with immigrants—they cannot make long-term plans, and that increases the likelihood of getting involved in activities—legal or illegal—that produce short-term benefits. The overall situation also increases the risk for undocumented foreigners of becoming *victims* of crime, as long as they would have troubles reporting those crimes to the authorities of the criminal justice system without revealing their irregular status of residence.

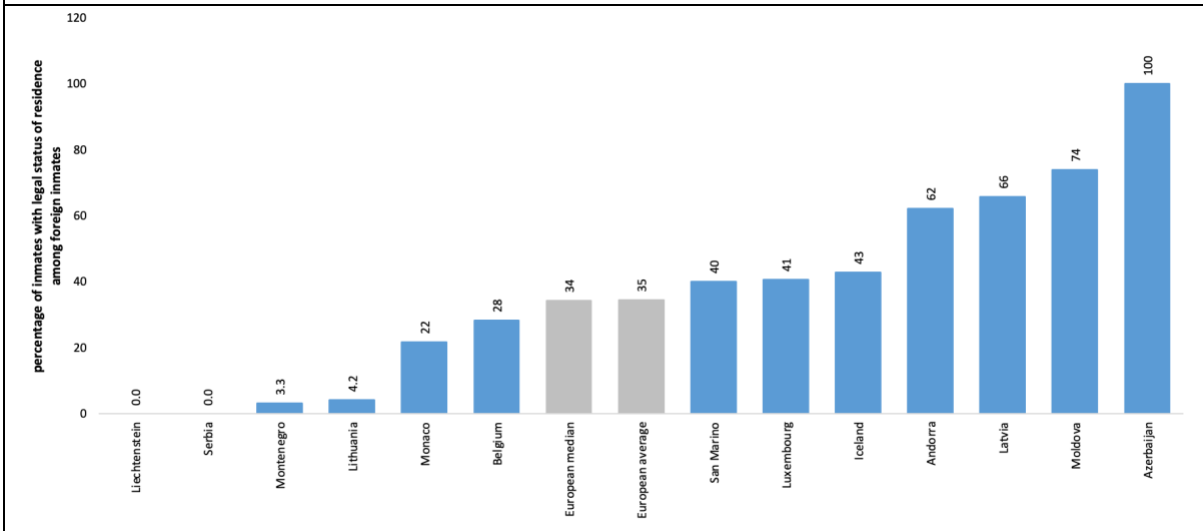
### Inmate's Legal Status of Detention: Distinguishing Between Detainees and Sentenced Prisoners

European PAs report, on average, that 30% of the inmate population on 31 January 2023 are individuals not serving a final sentence (see Figure 5 and SPACE I, Table 8 for additional details). Adopting the Council of Europe's terminology, these inmates should be referred to as *detainees placed in remand on custody* (Committee of Ministers Recommendation Rec (2006)13). In practice, these individuals are often referred to as *inmates in pre-trial detention*, *pre-trial detainees* or simply as *detainees*.

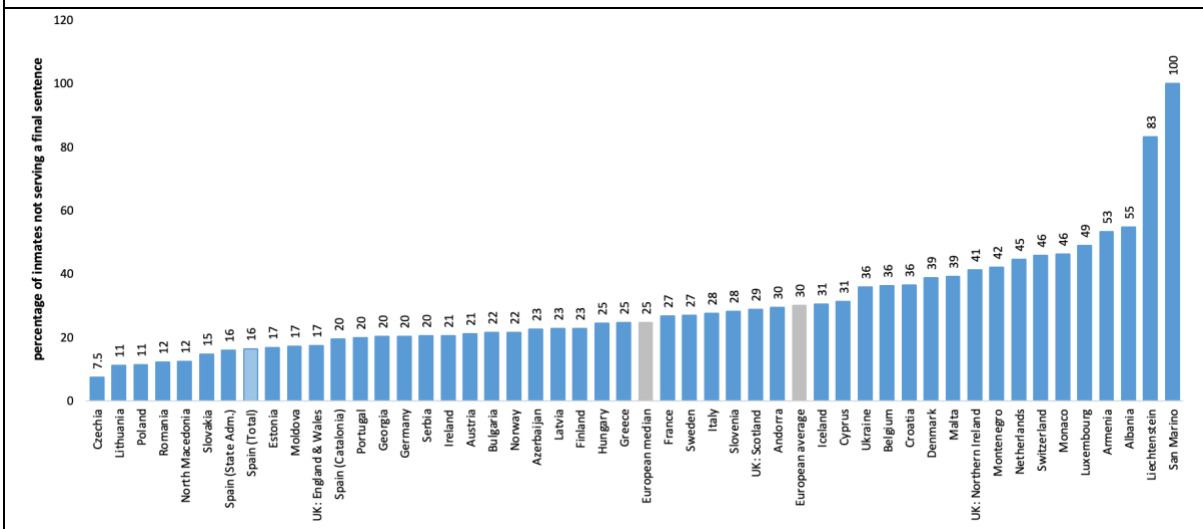
<sup>14</sup> Aebi, M. F., Cocco, E. & Molnar, L. (2023). *Prisons and Prisoners in Europe 2022: Key Findings of the SPACE I report*. Series UNILCRIM 2023/1. Council of Europe and University of Lausanne.

<sup>15</sup> Aebi, M. F. (2005). Immigration et délinquance: Le mythe du conflit des cultures. In Queloz, N. et al. (Eds.). *Délinquance des jeunes et justice des mineurs: Les défis des migrations et de la pluralité ethnique*. Berne: Staempfli & Bruylant. Aebi, M. F. (2016). Inmigración y delincuencia. In Aebi M. F. et al. (2016). Aspectos esenciales de la Criminología actual (pp. 64-100). Editorial UOC.

**Figure 4.3.** Percentage of inmates with legal status of residence among foreign inmates on 31.01.2023 (N=13 PA)



**Figure 5.** Percentage of inmates not serving a final sentence in the prison population on 31.01.2023 (N=47 PA)



**Figure 6.** Breakdown of sentenced prisoners by sentence length on 31 January 2023, in percentages (N=42 PA)

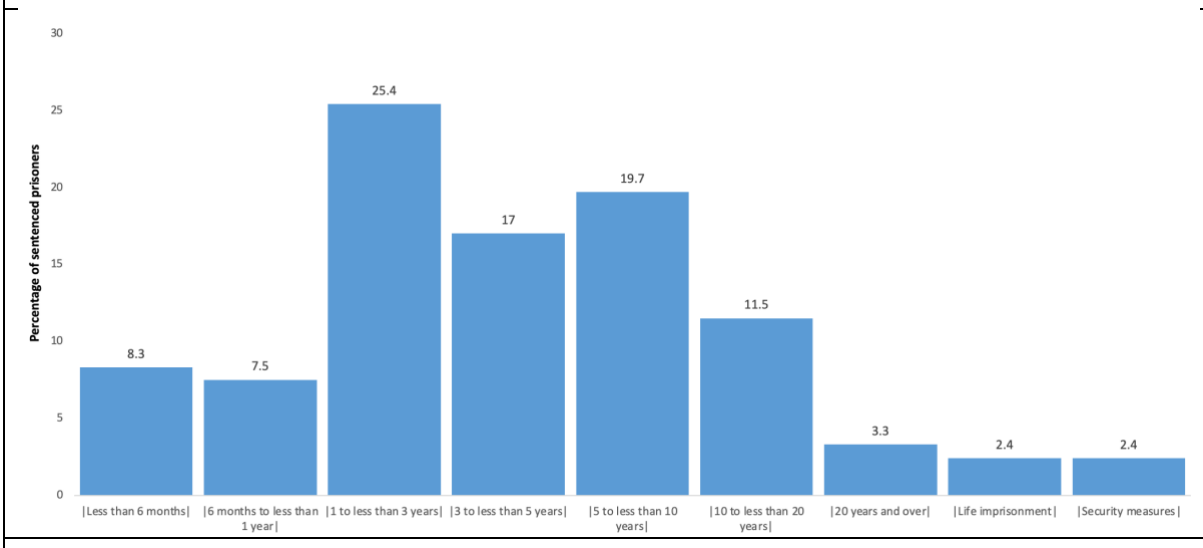


Figure 5 provides a detailed breakdown of the percentage of inmates classified as detainees in remand on custody in 47 European PAs. It exhibits significant variations in these proportions between different PAs. The European median indicates that half of these administrations have less than 25% of their detainees in remand on custody, while the remaining half has a higher percentage. Furthermore, the gap between the PAs with the highest and the lowest percentages is substantial.

In countries with populations exceeding 1,000,000, the administrations reporting the lowest percentages of detainees on remand in custody (less than 13%) include Czechia (7.5%), Lithuania (11.2%), Poland (11.4%), Romania (12.1%) and North Macedonia (12.3%). On the other hand, the administrations with the highest proportions (exceeding 40%) are those of Albania (54.7%), Armenia (53.3%), Switzerland (45.8%), the Netherlands (44.6%), and Northern Ireland (41.2%).

No clear regional patterns are discernible in the data. For instance, Albania and Armenia report notably high percentages of inmates without a final sentence (55% and 53% respectively), while other nations in the Central and Eastern European region such as Romania, Bulgaria, and Poland report substantially lower percentages (12%, 22%, and 11% respectively). Similarly, significant variations exist between neighbouring countries. For example, Austria (21%) and Germany (20%) have comparatively lower rates than Belgium and Switzerland (36% and 46% respectively). These dissimilarities seem indicative of country-specific circumstances that are influencing the distribution of inmates by their legal status of detention.

- Criminologists tend to perceive high percentages of detainees on remand in custody as an indicator of potential inefficiencies within the legal system, frequently relating to slow court procedures, resource inadequacies, or even the reliance on pre-trial detention as a punitive rather than precautionary measure. However, these interpretations are generalisations, and the actual circumstances can be more nuanced and influenced by a multitude of country-specific factors. For instance, countries with a high proportion of foreign inmates, such as Switzerland, may find it necessary to keep those without a legal residence status in pre-trial detention due to the risk of absconding.

Conversely, a low percentage of detainees in remand on custody is traditionally viewed as a potential indicator of an efficient legal system with prompt case processing, resulting in a reduced proportion of pre-trial detainees. It might also be reflective of policies and practices favouring non-custodial measures for individuals awaiting trial.

**Disclaimer:** Some countries classify inmates as sentenced prisoners as soon as they receive their initial sentence, irrespective of any pending appeal processes. Therefore, individuals who have lodged an appeal or are within the statutory limits to do so are not incorporated within the total number of detainees not serving a final sentence. Consequently, interpreting the differences observed in Figure 5 requires careful consideration and must consider country-specific indications (see SPACE I, Table 8 and accompanying notes for additional information).

## 2.2. Characteristics of the sentenced prisoners held in European penal institutions

### Sentenced prison population: Breakdown by sentence length

Having distinguished between detainees and sentenced prisoners, we now focus on the latter to examine the length of sentences they are currently serving. Figure 6 illustrates this breakdown, representing the proportion of inmates in European prisons by each length of the sentence. The total percentage does not amount to 100%, owing to slight variations in the number of PAs included when calculating each sentence length.

Predominantly, prisoners are serving "medium-term" sentences, spanning between 1 and less than 10 years. At both ends of the distribution spectrum, we observe two groups that roughly comprise a sixth of the prison population each, serving either short sentences (less than one year) or long sentences (10 years or more).

Among the predominant group of inmates, the main group (25%) are serving sentences from 1 to less than 3 years, followed by those sentenced to 5 to less than 10 years (20%), and 3 to 5 years (17%). On the lower end of the distribution, 7.5% of prisoners are serving sentences of 6 months to less than a year, with about 8.3% serving sentences of less than 6 months.

Additionally, the SPACE I survey reveals that several countries with high prison population rates often have percentages of inmates serving sentences under 6 months near or below the European average of 8.3%. For instance, Georgia, Moldova, and Hungary report very low percentages of less than 1% (see SPACE I, Table 11).

Contrastingly, several countries with low prison population rates tend to have high percentages of prisoners serving sentences under 6 months. Notably, the Netherlands and Switzerland report 25% and 26% respectively, far exceeding the European average. Nordic countries are also well above that average of 8.3%, as prisoners serving sentences under 6 months represent 13% of the Norwegian prison population, 13% of the Finnish, and 12% of the Danish. However, Sweden's rate hovers closely around the European average, standing at 7.6%.

- The proposal of abolishing short-term sentences has sparked debates among theoretical jurists and criminologists for contrasting reasons. Franz von Liszt (1851-1919) saw them as counterproductive for “occasional offenders” and insufficiently long for a proper rehabilitation of “reformable offenders.”<sup>16</sup> Conversely, abolitionists since the 1970s view their elimination as a step towards dismantling an inherently unjust prison system.

Empirical evidence from countries including Austria, Germany, Greece, and Portugal, which limited the use of short-term sentences in the 1970s and 1980s, especially those under six months, suggests a backlash effect. The initial reduction in prison population was short-lived as judges imposed harsher sentences, leading to an increase in the prison population.<sup>17</sup> This consequence seems to stem from judges feeling obliged to impose longer sentences, particularly when they perceive incarceration as necessary, such as in cases of repeat offenders. The media's role in advocating for harsher punishment can exert similar effects.

These findings suggest that, in the absence of a cultural shift towards rehabilitation and reintegration, abolishing short sentences entails the risk of leading to longer sentences.

At the higher end of the sentence length spectrum, the proportion of inmates serving longer sentences gradually decreases. Specifically, 11.5% are serving sentences of 10 to less than 20 years, 3.3% are serving sentences of 20 years and over, and an additional 2.4% are serving life sentences.

- According to the latest factsheet on *life imprisonment* and the European Convention of Human Rights (ECHR), the European Court of Human Rights deems compatible life imprisonment with the ECHR, as long as prisoners have both a chance of being released and a possibility for their sentences to be reviewed.<sup>18</sup> Therefore, in the countries reporting life sentences in Table 11 of SPACE I report, prisoners face a prescribed maximum sentence duration after which they can apply for parole or an equivalent release mechanism, such as a pardon, or a release on compassionate grounds or through executive clemency.

For instance, in Switzerland, a life-sentenced offender is eligible for parole after 10 or 15 years, depending on circumstances. Similar provisions exist in Denmark (12 years), Germany (15 years), Sweden (10 years, but the sentence can be converted to a fixed sentence after 10 years), Italy (21 or 26 years), France (18 to 22 years), Spain (25 or 35 years), and Belgium (15, 19, or 23 years).

Finally, we note that 2.4% of inmates are subject to security measures (see SPACE I, Table 11 for further details).

- Security measures aim to prevent future crime by incapacitating or treating offenders considered as a high risk to society (*dangerous offenders*), sometimes due to mental disorders. While these measures are generally indeterminate, legislation typically includes control mechanisms that may lead to eventual release. *Recommendation CM/Rec(2014)3* of the Committee of Ministers to Member States concerning dangerous offenders treats them under the denomination of Secure preventive detention and Preventive supervision.

The application of security measures varies across countries. In Belgium, for example, inmates declared irresponsible by the court are treated in forensic psychiatric centres separate from the prison administration and are not included in the total inmate count. In contrast, the forensic detention facilities of Czechia fall under the prison administration, and individuals within them are included in the total inmate count. Portugal applies security measures to individuals found irresponsible, housing them in psychiatric institutions or hospitals that can be inside or outside prison facilities, but counting them in both cases as inmates under the responsibility of the prison administration.

Ten countries provided figures on inmates under security measures, 19 indicated having no inmates under such measures, while the remaining countries stated these measures do not exist within their system. The true absence of these measures in the 19 countries reporting zero inmates remains uncertain. If that absence means in fact that security measures do not exist in their legal system (*i.e.*, the answer should have been not applicable instead of non-available) the average percentage of inmates under such measures would increase to around 6%

<sup>16</sup> Kempe, D. T. (1969). Franz von Liszt und die Kriminologie. In *Franz von Liszt zum Gedächtnis: zur 50. Wiederkehr seines Todestages am 21. Juni 1919* (pp. 260–280). De Gruyter.

<sup>17</sup> Kuhn, A. (2000). *Detenus: Combien? Pourquoi? Que faire?* Haupt.

<sup>18</sup> <https://rm.coe.int/thematic-factsheet-life-imprisonment-eng/1680ab3b93>.



from the current 2.4%. On a final note for this section, let us remark that several countries, including Belgium, Denmark, Italy, and Switzerland, implement both indeterminate measures and life imprisonment with the possibility of parole.

### Sentenced prison population: Breakdown by main offence

Figure 7 presents an analysis of the population of sentenced prisoners in Europe, distributed by the principal offence for which they have been convicted. The offence categories include drug offences, theft, homicide (including attempts), robbery, assault and battery, sexual offences, rape, road traffic offences, economic and financial offences, and other miscellaneous crimes.

- Criminology research uses one of two methods to determine the distribution of sentenced prisoners by offence: the principal offence rule or the count-all-offences rule. Under the principal offence rule, only the most severe crime is considered in instances where an individual is convicted of multiple offences. Typically, the severity of an offence is judged by the maximum penalty defined by law. This approach provides a streamlined, but simplified, overview of the crime distribution among prisoners, emphasising the most serious crimes leading to convictions. However, it can inadvertently underrepresent less severe but frequently associated crimes.

On the other hand, the count-all-offences rule involves acknowledging all offences that an individual has been convicted of, without prioritising their severity. This method offers a more holistic understanding of the crime distribution known by the latest stage of the criminal justice system, considering both minor and major offences. However, it introduces the issue of *double-counting*, where individuals convicted of multiple crimes are counted more than once.

The SPACE I questionnaire asks Council of Europe member states to provide their distribution of sentenced prisoners applying the principal offence rule. This method is also commonly employed by most of those states for their prison statistics. Yet, certain PAs—namely Belgium, Georgia, Latvia, Malta, Monaco, and Türkiye—deviate from this rule and count all offences.

Figure 7 shows that drug offences are the most common main conviction among prisoners, with these offenders constituting 19% of the total sentenced population. Homicide, including attempted homicide form the second largest category, with a proportion of 13%, closely followed by theft-related convictions, at 12%. Sexual offences (including rape), robbery and assault and battery crimes make up the next significant proportions, at 8.9%, 7.7% and 6.7% respectively. The categories of road traffic offences, and economic or financial offences comprise a smaller percentage of the overall prison population, with figures at 3.0% for both of them. All other offences under criminal law contribute to 23% of the total sentenced population.

A significant insight here is the prominence of violent crimes in prison populations, with homicide, robbery, assault and battery, and sexual offences (including rape) collectively accounting for 36% of the total offences. This highlights the critical impact of violent crime on prison populations.

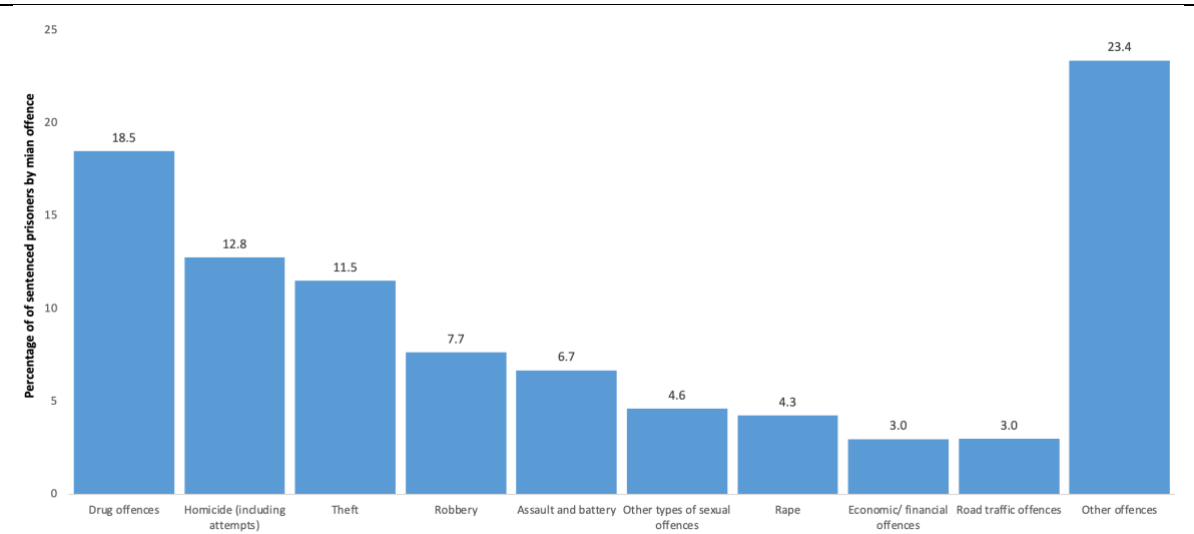
Furthermore, the fact that drug offences account for the highest proportion of prisoners suggests potential underlying issues of widespread drug misuse in the European population. This indirectly influences organized crime, primarily through drug trafficking, a subject we will delve into later in this section.

Cumulatively, violent and drug offences represent more than half of the crimes for which European prisoners are serving sentences. The remaining third comprises a variety of offences, with each category representing a relatively small percentage of the sentenced prison population.

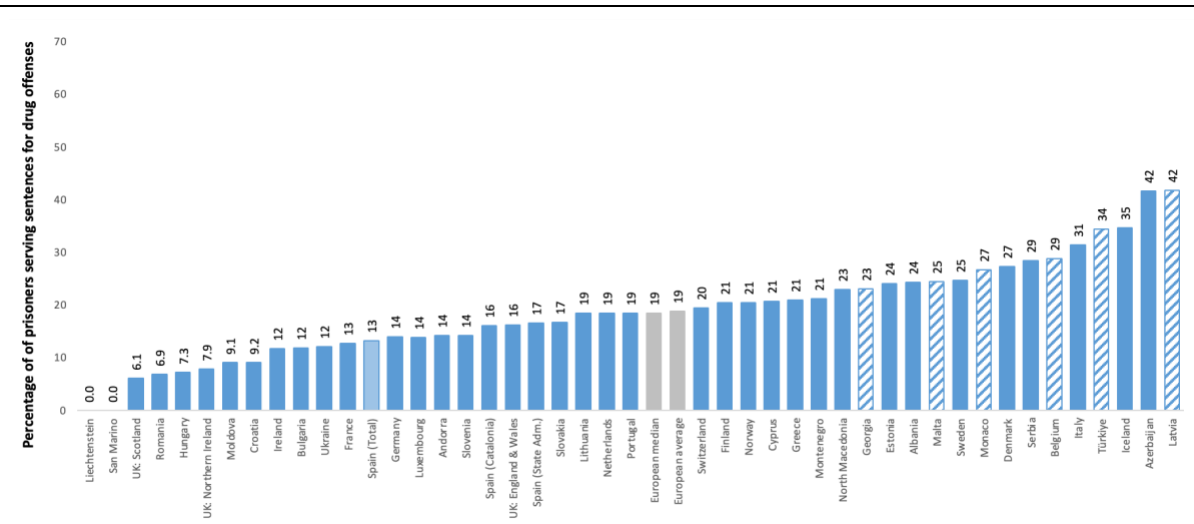
- The relatively low proportion of the “other offences” category can be attributed to several factors such as the relative frequency of these crimes, the efficacy of preventive measures, and the criminal justice system's approach towards these crimes. The latter might involve favouring penalties like fines, community service, or other non-custodial sentences over imprisonment. This distribution seems to suggest that prison sentences are primarily reserved for the most severe crimes, as recommended by the Council of Europe and fundamental to democratic societies.

Five out of the six PAs that do not apply the principal offence rule provided a comprehensive breakdown of all sentenced prisoners, including those falling into the *other offences* residual category (see SPACE I, Table 9 for further details). These data allow us to calculate the ratio of the number of offences to offenders, thereby illustrating the average number of offences included in each offender's sentence. This ratio varies significantly from country to country. For example, in Belgium, there are 2.4 times more offences than offenders, in Latvia, it is 2.3 times, in Monaco 2 times, in Georgia 1.4 times, and in Malta 1.01 times. This implies that, on average, every offender sentenced to prison in Belgium is convicted for 2.4 offences, in Latvia for 2.2, in Monaco for 2, in Georgia

**Figure 7. Breakdown of sentenced prisoners by principal offence on 31 January 2023, in percentages (N=45 PA)**

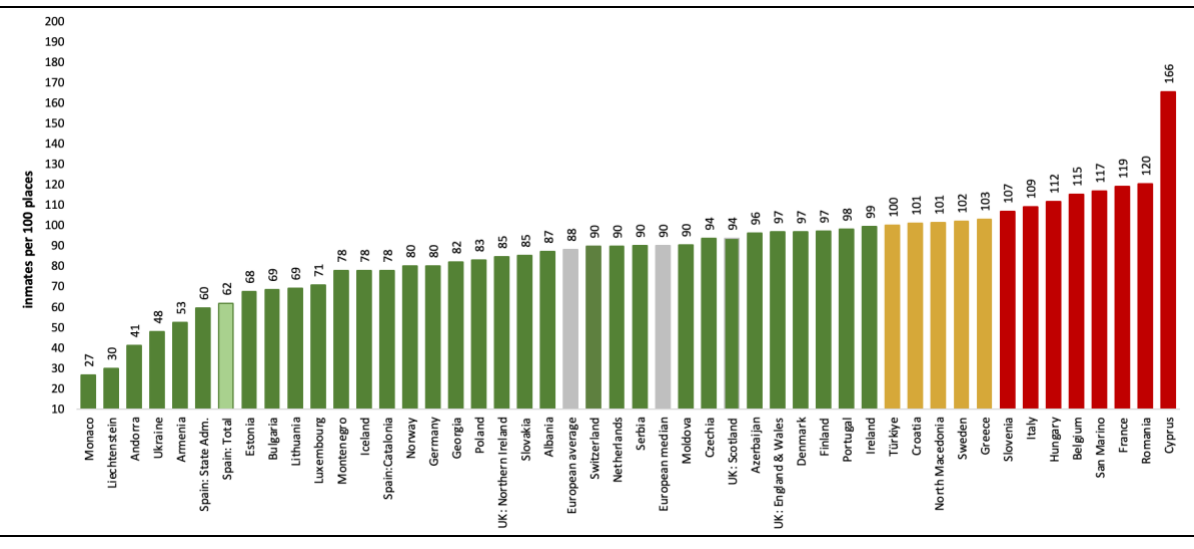


**Figure 8. Percentage of sentenced prisoners serving sentences for drug offences on 31 January 2023 (N=44 PA)**



**Note to Figure 8:** PAs that do not apply the principal offence rule are presented in blue stripes.

**Figure 9. Prison density (number of inmates per 100 detention places) on 31 January 2023 (N=45 PA)**



for 1.4 and in Malta for 1. However, the ratios for Malta and Monaco are less reliable due to their comparatively smaller numbers of offences and offenders. Türkiye did not provide data for the *other offences* residual category, which can often be substantial in some countries, yet still presents a ratio of 1.2.

The impact of both the principal offence rule and the count-all-offences rule is visualised in Figure 8. This figure represents the percentage of prisoners serving sentences for drug offences, which are the principal offences leading to imprisonment in Europe, having an average and a median of 19% of sentenced prisoners. In Figure 8, the countries not applying the principal offence rule are represented with blue stripes. Interestingly, four of these countries fall among the ten administrations with the highest percentages of prisoners sentenced for drug offences. Moreover, all six of them are represented in this Figures, therefore presenting a higher percentage than the European median. Latvia, for instance, has a drug offence rate of 42%, suggesting that—unless some prisoners have been sentenced for more than one drug offence simultaneously—almost half of Latvia's detainees are serving sentences for drug offences. Surely some of them were imposed together with convictions for other crimes, of which some would entail a longer prison sentence, and that would have made the drug offence disappear from the statistics if the principal offence rule had been applied. Similarly, among countries with populations exceeding one million, 34% of the sentenced prisoners in Türkiye and 29% of those in Belgium had been convicted for drug offences. These are good examples of how both counting rules provide different kinds of relevant information.

The remaining countries, which do not apply the principal offence rule, still display relatively high percentages of prisoners sentenced for drug offences. This pattern raises the hypothesis that the number of prisoners serving sentences that include at least one drug offence could be significantly higher, further emphasising the role of drug misuse and drug trafficking within the European context.

- The challenge posed by drug use and misuse in a Democratic Europe extends to all demographic segments and impacts millions of individuals, arguably making it a top priority for criminal policy. In December 2020, the Council of the European Union adopted a new EU Drugs Strategy for 2022-2025, structured around three pillars: drug supply reduction, drug demand reduction, and harm reduction<sup>19</sup>. This strategy aligns closely with the “four pillars policy” (law enforcement, prevention, therapy, and harm reduction) introduced by Switzerland in 1991 and endorsed by almost 70% of the Swiss population in a 2008 referendum<sup>20</sup>. The resultant decline in drug-related crime and deaths by overdose could serve as a potential blueprint for policymakers in Europe and beyond.

### 2.3. Prison density

Figure 9 ranks 45 PAs according to their prison density on 31 January 2023. The prison density is a measure of how crowded a prison system is. It is expressed as the number of inmates per 100 available places in penal institutions. If the prison density is greater than 100, that means there are more prisoners than available places, indicating overcrowding. Conversely, if the prison density is less than 100, that suggests that there are fewer prisoners than available places, and the prison system is not overcrowded.

- The estimation of the prison density is contingent on the method used to calculate the number of places available in a penal institution. Two main metrics are utilised for this purpose, namely, *design capacity* and *operational capacity*. However, each country has its own interpretation and method of calculating these capacities, leading to inconsistencies in cross-country comparisons.

*Design capacity* refers to the number of inmates that a penal institution was originally designed to accommodate. It is typically based on the architect's intended number of occupants for each cell and for the prison as a whole. For example, if a prison was built with 100 cells, each designed to accommodate one inmate, the design capacity of the prison would be 100.

*Operational capacity*, in contrast, is a flexible metric subject to change over time and takes into account additional factors beyond the prison's original design. These factors can include shifts in policy regarding the acceptable number of inmates per cell, modifications to the prison's physical structure, or temporary measures like the use of extra beds in cells or communal spaces. Thus, a prison might have a design capacity of 100 but an operational capacity of 110, for instance.

<sup>19</sup> <https://data.consilium.europa.eu/doc/document/ST-14178-2020-INIT/en/pdf>.

<sup>20</sup> <https://www.bag.admin.ch/bag/en/home/strategie-und-politik/politische-auftraege-und-aktionsplaene/drogenpolitik.html>

Utilising the operational capacity metric renders prison density estimations unstable and makes cross-country comparisons highly unreliable. For example, a prison operating at 100% of its operational capacity (prison density=100) may appear suitably populated. Still, if it is operating beyond its design capacity, it should be considered overcrowded. Overcrowding in penal institutions raises concern due to its potential to worsen living conditions (impacting sanitation and privacy), escalate tension or violence among prisoners, and limit prison staff's capacity to effectively manage inmates and deliver appropriate rehabilitation and reintegration programmes.

Some countries fix through their national laws the number of square or cubic metres per inmate. The result is similar to that obtain when applying the concept of *design capacity*.

The SPACE questionnaire requests PAs to estimate their number of available places using the design capacity concept, yet several administrations do not employ this method (see SPACE I, Table 15).

Of the 45 PAs included in Figure 9, thirteen reported a prison density surpassing 100 inmates per 100 places. Among these, five administrations, presented in yellow in the Figure, had a density greater than 100 but less than 105. Eight administrations, highlighted in red, exhibited serious overcrowding with rates exceeding 105 inmates per 100 spaces. The remaining 32 PAs, represented in green, reported no overcrowding, although some are right on the edge of it.

The countries with the most severe overcrowding are Cyprus (166 inmates per 100 places), Romania (120), France (119), Belgium (115), Hungary (112), Italy (109) and Slovenia (107). Greece (103), Sweden (102), North Macedonia (101), Croatia (101) and Türkiye (100) report slight overcrowding. Ireland and Portugal are operating at full capacity with 99 and 98 inmates per 100 available places, respectively.

**Disclaimer:** We remind that data on prison density and overcrowding should be interpreted with caution since countries employ different counting rules to estimate available places. This discrepancy affects the reliability of cross-country comparisons of prison density.

## 2.4. Prison staff

Figure 10 presents the inmate-to-staff ratios in 47 European PAs. This represents the number of inmates that each staff member is responsible for, which can be an important factor when evaluating prison conditions, staff workload, and the capacity for effective prison management, rehabilitation programmes, and safety measures.

- High ratios can burden staff members with excessive workloads, leading to increased stress, burnout, and potentially higher turnover rates. The stability of the prison system could be affected, with potential adverse effects on management quality and the provision of rehabilitation services. Moreover, elevated inmate-to-staff ratios may pose safety risks, as maintaining order and security could become challenging, increasing the likelihood of violence or other disturbances. Furthermore, such ratios could negatively influence the quality of interaction between staff and inmates. Overworked and stressed staff may have less personal and positive interaction with inmates, which could affect inmate behaviour and the overall prison climate.

In contrast, prisons with lower inmate-to-staff ratios may experience more efficient operation as staff can allocate more time to administrative tasks, inmate management, rapport building, and problem-solving. This could result in a better-organised and more humane prison environment.

Of all the administrations surveyed, Türkiye reports the highest ratio, with 4.5 inmates per staff member. This means that each staff member is responsible for managing over 4 to 5 prisoners. Following Türkiye are Georgia and North Macedonia with a ratio of 2.7.

At the other end of the spectrum, the Netherlands, Norway, Sweden, Iceland and Luxembourg have ratios below 1, while Denmark reports a staff-to-inmate ratio of 1. This suggests a more manageable workload for prison staff and potentially better conditions for inmate management and rehabilitation.

The countries reporting the highest inmate-to-staff ratios, such as Türkiye and Georgia, also have the highest prison population rates. Conversely, several countries with the lowest ratios, including the Netherlands, Norway, and Denmark, are also among those with the lowest prison population rates.

- Although this correlation is noteworthy, one must be cautious about drawing causal conclusions. A low ratio can indicate a well-balanced system or successful rehabilitation programmes leading to reduced recidivism. It does not simply imply an adequate staff number due to a low inmate population, and vice versa.

It is also crucial to consider the varying definitions and classifications of prison staff across different countries. The term *staff member* can encompass a range of roles, from security personnel to those offering health services, educational instruction, or rehabilitation programme coordination, to individuals handling administrative tasks. Consequently, the ratios between non-custodial and custodial staff can vary widely across PAs. Furthermore, among the custodial staff, some individuals might focus exclusively on custody duties, while others might also undertake additional responsibilities.

In this light, Figure 10 shows the median European inmate-to-staff ratio at 1.5. However, the ratio tends to increase when considering specific staff categories. For instance, focusing on custodial staff only, the median European ratio rises to 2.6 inmates per custodian. Further narrowing the scope to custodial staff primarily dedicated to maintaining safety and security within penal institutions, the ratio increases slightly to 3.1 inmates per custodian solely focused on custody (as per the terminology used in the SPACE I questionnaire, please refer to SPACE I, Table 21).

### 3. Flow indicators for the year 2022

#### 3.1. Admissions into penal institutions in 2022

Figure 11 presents the rate of admissions per 100,000 inhabitants in the penal institutions of 47 European PAs during the year 2022. According to the standard definition provided in the SPACE questionnaire, admissions refer to all entries of inmates into penal institutions that are not related to an ongoing detention. The counting unit is the number of admissions. This means that some inmates may contribute multiple admissions within a year if they are detained, released, and subsequently detained again. Belgium, Czechia, Netherlands, Poland, Sweden, Switzerland, and Scotland (UK) employ a different definition of admissions incompatible with that of SPACE I. Thus, their rates are non-comparable to the rest and are marked distinctly with a striped pattern (see SPACE I, Table 22).<sup>21</sup>

For 2022, the 47 PAs documented a total of 1,249,277 admissions. This equates to a European average of 167 admissions per 100,000 inhabitants and a median rate of 140 (see SPACE I, Table 23). North Macedonia tops the list with the highest admission rate of 580 per 100,000 inhabitants, contrasting sharply with Portugal, Armenia, and Italy, which recorded some of the lowest rates at 47, 53 and 65, respectively. The considerable range of rates—North Macedonia's rate is more than 12 times higher than that of Portugal—underscores the extensive variation observed throughout this report across Europe.

Central and Eastern European countries tend to be overrepresented among administrations reporting higher admission rates, whereas Western countries are slightly more prevalent among those with lower rates. However, several exceptions blur this regional pattern, indicating that it is not consistent, such as in Armenia.

- It is crucial to keep in mind that these rates simply represent the frequency of prison admissions and are only indirectly related to the effectiveness of a country's criminal justice system or the prevalence of crime. While it is true that admission rates decreased during the first year of the pandemic due to lockdown-induced crime reduction<sup>22</sup>, these circumstances were exceptional and usually the relation between both rates is much more complex and indirect.

Similarly, the relation with the prison population rates presented in Figure 1 is complex and inconsistent across countries. For instance, Türkiye records high rates for both prison population and admissions, and Norway low values for both; but Spain and Portugal show low admission rates despite having prison population rates above the median. In sum, no consistent correlation exists between the prison population rate and the rate of admissions across all countries. Yet, assessing both rates in conjunction can yield valuable insights into the average length of detention. This metric will be explored in Figure 13, following an analysis of release rates in Figure 12.

#### 3.2. Releases from penal institutions in 2022

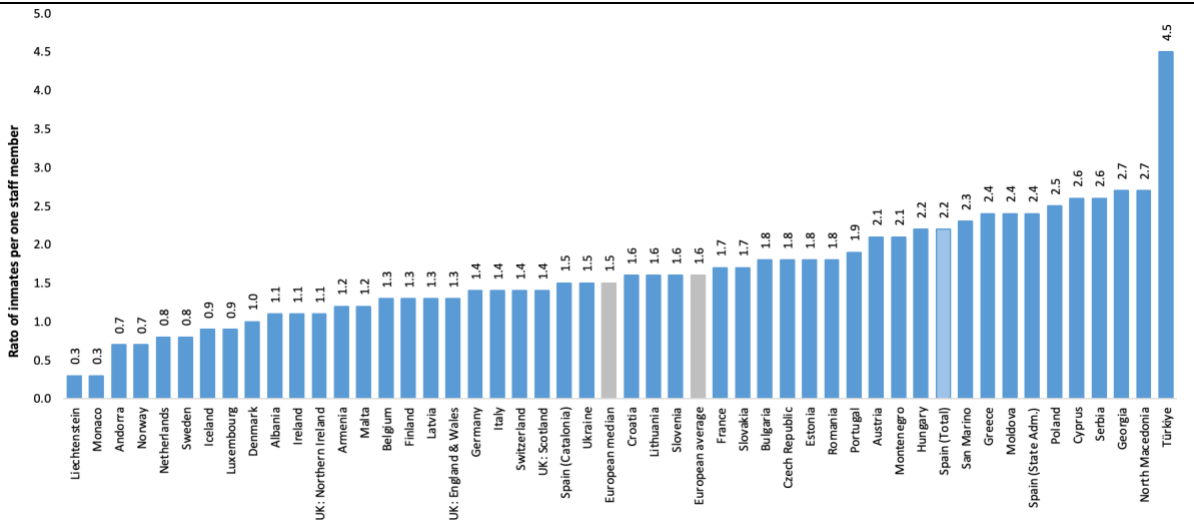
In the SPACE questionnaire, exits from penal institutions include releases, deaths, and escapes. These three types of exits are not necessarily registered using the same counting unit (the person, the incident, etc.); however, if

---

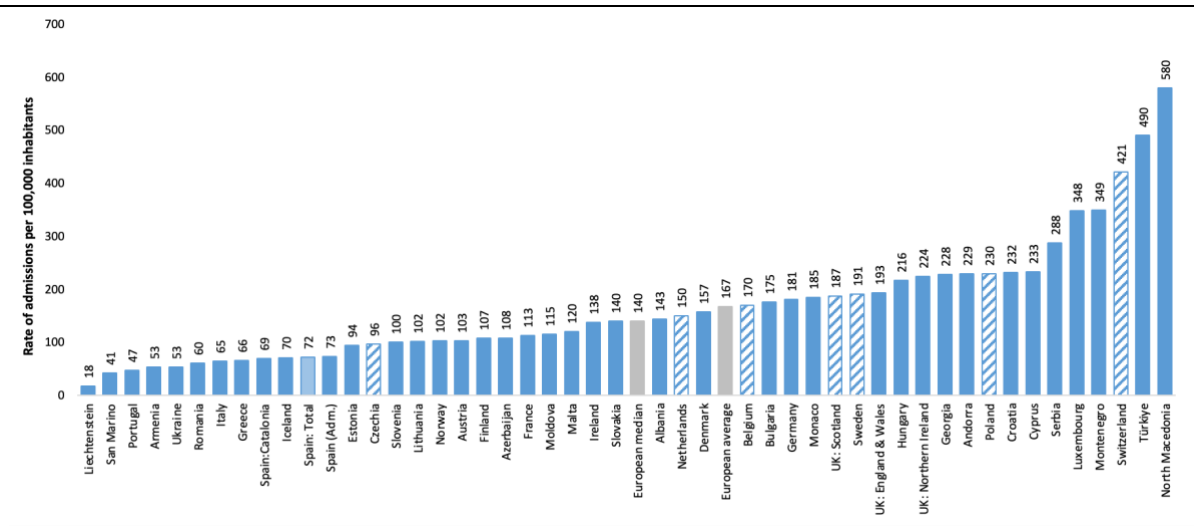
<sup>21</sup> For example, Switzerland counts as releases and admissions the transfers of inmates from one Swiss penal institution to another, which increases artificially the total number of admissions and releases.

<sup>22</sup> Aebi, M. F., Cocco, E. & Molnar, L. (2023). *Prisons and Prisoners in Europe 2022: Key Findings of the SPACE I report*. Series UNILCRIM 2023/1. Council of Europe and University of Lausanne.

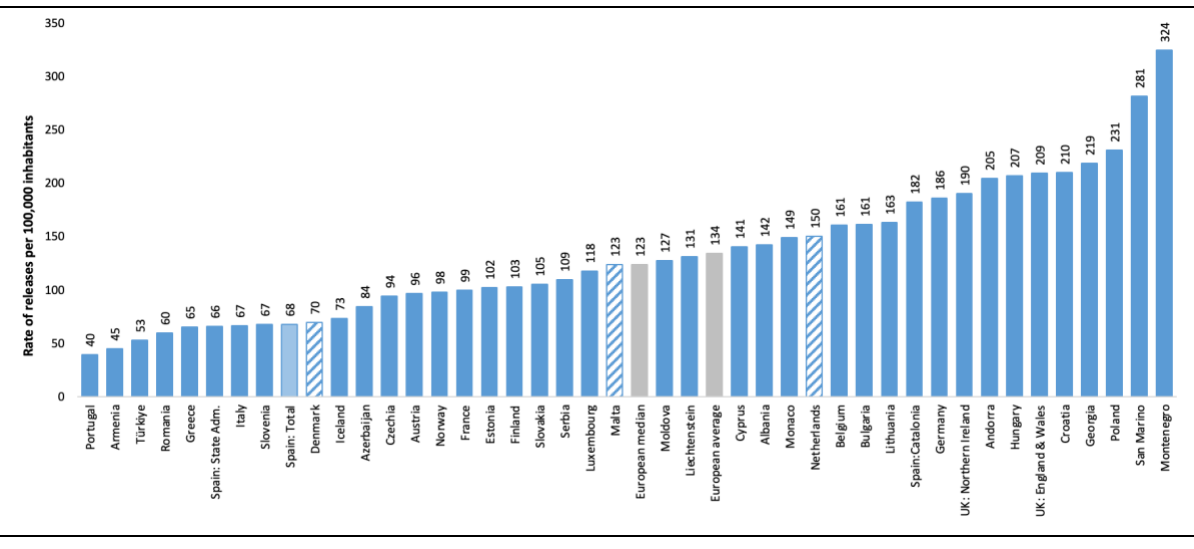
**Figure 10.** Ratio of inmates per one prison staff member on 31 January 2023 (N=47 PA)



**Figure 11.** Rate of admissions in penal institutions, per 100,000 inhabitants, during 2022 (N=47 PA)



**Figure 12.** Rate of releases from penal institutions, per 100,000 inhabitants, during 2022 (N=41 PA)





one produces an artificial total by adding them, deaths and escapes account for less than 1% of all exits. All other exits are due to releases from penal institutions. Consequently, we will concentrate herein on them.

Figure 12 presents the rate of releases per 100,000 inhabitants in the penal institutions of 41 European PAs during the year 2022. Releases—like admissions—refer to all releases of inmates from penal institutions that are not related to an ongoing detention (transfers, for example, are not included), meaning an individual can be released more than once throughout the year. Denmark, Malta and the Netherlands reported using a different definition of release. Thus, their rates are non-comparable to the rest and are marked distinctly with a striped pattern (see Figure 12 and SPACE I, Table 24)<sup>23</sup>.

As expected, the rates of admissions and exits per 100,000 inhabitants vary significantly between the countries. However, for most of the countries, the rates of exits are fairly close to the rates of admissions. This can be appreciated, for example, in the similar ranking of PAs in Figures 11 and 12. This pattern suggests a certain degree of consistency in each prison system. Theoretically, the inmate turnover—that will be estimated empirically later—might be high, with many individuals entering and leaving the prison system within the year, but the overall prison population might remain stable. Conversely, significant discrepancies between the admission and exit rates should logically suggest (a) a growing prison population (if admissions outpace exits) or (b) a shrinking prison population (if exits outpace admissions). The second scenario was observed in the 2021 SPACE report, which contains flow data for 2020, the first year of the COVID-19 pandemic<sup>24</sup>.

### 3.3. Average length of imprisonment

Figure 13 provides an indicator of the average length of imprisonment (IALI), in months, across 46 European PAs in 2022. This is an estimate of the duration for which individuals, on average, are incarcerated.

- Research suggests that lengthy detentions are usually correlated with the punitiveness of a criminal justice system or with its slowness. Swift criminal justice systems are characterised by short criminal procedures, while the less punitive criminal justice systems tend to impose short sentences and facilitate the liberation of inmates. Moreover, there is consensus that an effective approach to reducing prison population rates is to diminish the duration of incarceration.

The SPACE questionnaire asks for the *number of days spent in penal institutions* during the year of reference (2022), which corresponds to the sum of the days—in practice, most countries count the number of overnights—spent in any penal institution by every inmate. Dividing that number by 365 (366 in leap years), one obtains the *average number of inmates* during that year. Combining these two measures one can obtain an indicator or the average length of imprisonment (IALI). However, as some countries do not provide data on the number of days spent in penal institutions—or provide a figure that does not seem reliable—an alternative indicator of the average length of imprisonment can be estimated using the stationary population model applied in demography. According to the latter, the stock is the product of the flow multiplied by the length. Applying the division property of equality, this means that the length is the quotient of the stock (on 31 January 2023) divided by the flow of admissions (in 2022) and multiplied by 12 to express it in months (see SPACE I, Part E for further details). This indicator remains an estimate and must be interpreted cautiously because the counting unit for the stock is the person and that for the flow is the admission. However, it provides estimates that are usually quite close to those obtained with the original formula while allowing for the inclusion of a larger number of PAs. This year, for instance, the IALI according to the original formula indicates 10.7 months, against 11.8 with the formula based on the stock and flow.

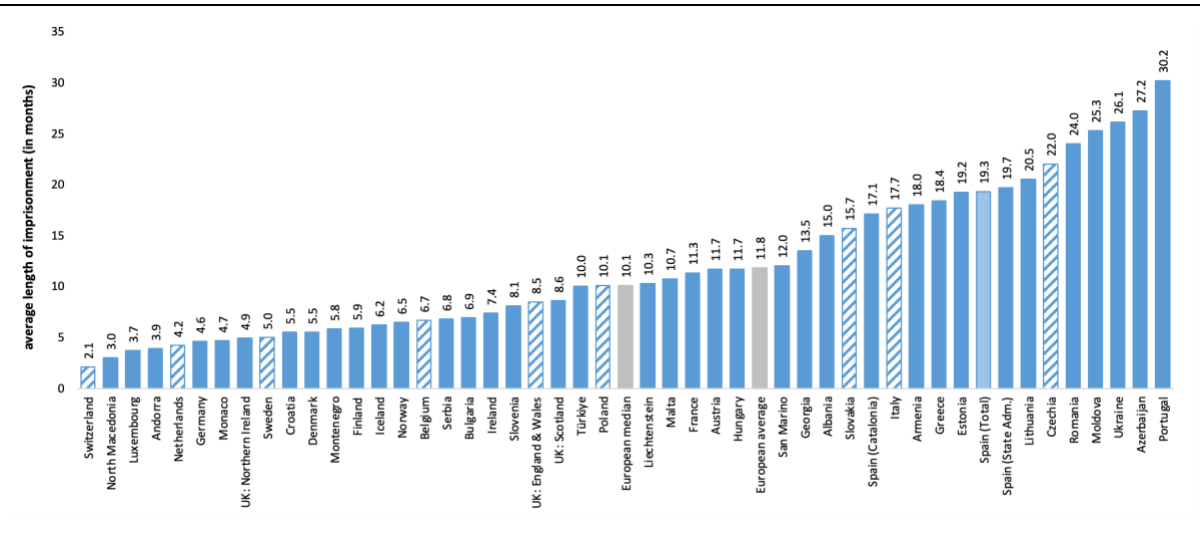
The average length of imprisonment across all surveyed European countries is approximately 11.8 months, with a median of 10.1 months. This suggests that the average imprisonment length for most countries is close to this range, although there are outliers that considerably shift the mean.

Once again, Belgium, Czechia, Italy, Poland, Slovakia, Switzerland, Sweden, the Netherlands, England & Wales (UK) and Scotland (UK) are illustrated in a striped pattern, as their definition of flow (utilised to estimate the IALI)

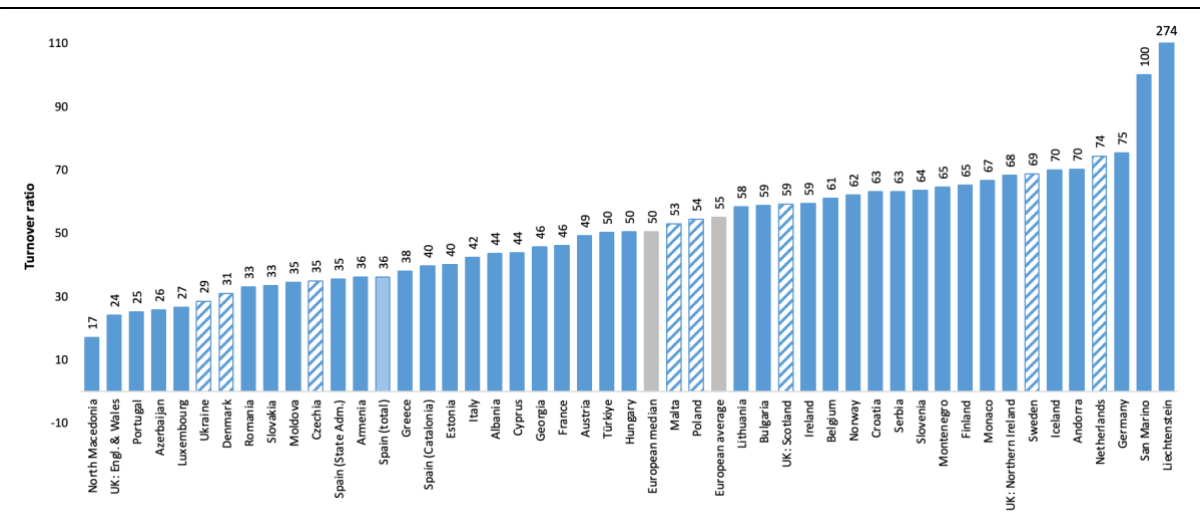
<sup>23</sup> For example, Switzerland counts as releases and admissions the transfers of inmates from one Swiss penal institution to another, which increases artificially the total number of admissions and releases.

<sup>24</sup> Aebi, M. F., Cocco, E., Molnar, L. & Tiago, M. M. (2022). Prisons and Prisoners in Europe 2021: Key Findings of the SPACE I report. Series UNILCRIM 2022/3. Council of Europe and University of Lausanne.

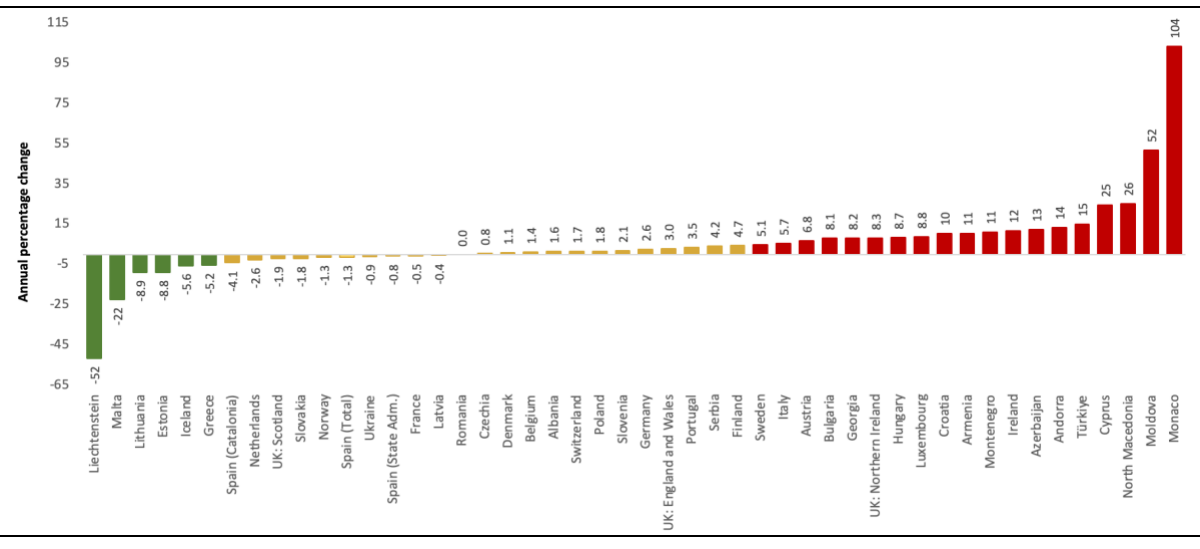
**Figure 13.** Average length of imprisonment in 2022, based on the stock and flow of inmates (N=46 PA)



**Figure 14.** Turnover ratio in 2022 (N=46 PA)



**Figure 15:** Annual percentage change in prison population rates: 2023 compared to 2022 (N=47 PA)



does not align with that of SPACE I. Consequently, their estimated imprisonment durations are not comparable with those of the other prison administrations (see SPACE I, Table 22).

Prison Administrations (PAs) with a long average imprisonment duration (over 25 months) include Portugal, Ukraine, Azerbaijan and the Republic of Moldova. On the other hand, PAs with the shortest average sentences (under 6 months) are Switzerland, North Macedonia, the Netherlands, Germany, Northern Ireland (UK), Sweden, Denmark, Croatia, Montenegro and Finland. No definitive regional patterns are evident, as nations within the same geographical area exhibit different average imprisonment lengths. For instance, all 10 PAs with the longest average incarceration durations are from Mediterranean, Central, and Eastern regions.

When Figure 13's IALI is compared with the prison population rates shown in Figure 1, no obvious correlation is discernible. However, a pattern appears to surface: PAs with the shortest incarceration lengths tend to have lower prison population rates, while those with longer sentences often display medium-to-high prison population rates.

### 3.4. Turnover ratio

The turnover ratio is an estimation of the release rate per 100 potential releases, essentially the proportion of actual releases from the total number of potential releases. It is calculated using raw data: the prison population (stock), the number of admissions (flow of admissions) and the number of releases (flow of releases). Specifically, the sum of the stock on 31 January 2022 (taken from SPACE I 2022) and the flow of admissions throughout the year provides an estimate of the total number of who are potentially due for release in 2022. This figure is then juxtaposed with the actual number of releases that took place during the year. A low turnover ratio (below 50%) suggests extended periods of detention and could thus be seen as an early warning sign of the risk of prison overcrowding (See SPACE I, Table 27).

Figure 14 reveals that the average turnover ratio for the European prison population of 46 PAs in 2022 stood at 55%. PAs with definitions of admissions or releases that do not concur with those of SPACE I are represented in a striped pattern, indicating that their turnover ratios are not comparable with those of the other PAs (see SPACE I, Table 22).

Generally, an emerging trend is noticeable when examining countries with a population exceeding one million and comparing their turnover ratio with their prison population rates. With a few deviations, countries exhibiting the lowest turnover ratios tend to have high or exceedingly high prison population rates, and the opposite is also true.

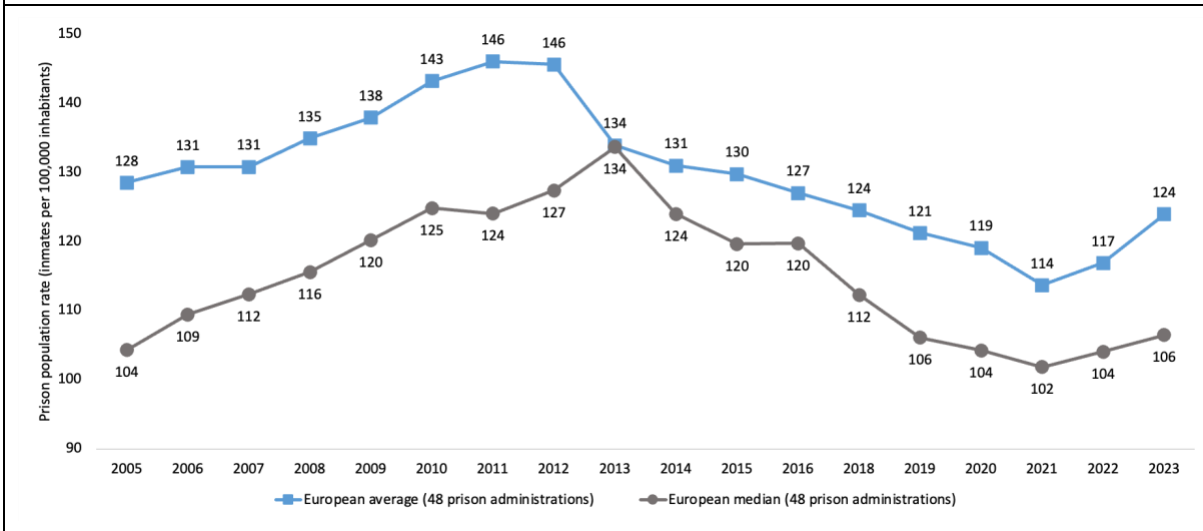
## 4. Trends from 2005 to 2023

Figure 15 presents the annual variation of the prison population rate, comparing 31 January 2023 to 31 January 2022, across 47 PAs. For the second consecutive year, most PAs register either increases or stable rates. Specifically, 23 PAs maintained stable prison population rates, while 19 experienced a substantial increase (exceeding 5%). Among nations with a population exceeding one million, only four (Lithuania, Estonia, Ireland, and Greece) reported a noteworthy decrease (greater than -5%). This can also be seen in Table 2—focusing solely on prison administrations with more than one million inhabitants (39 PAs)—which shows an overall increase in their prison population rate of around 2.4% between 2022 and 2023.

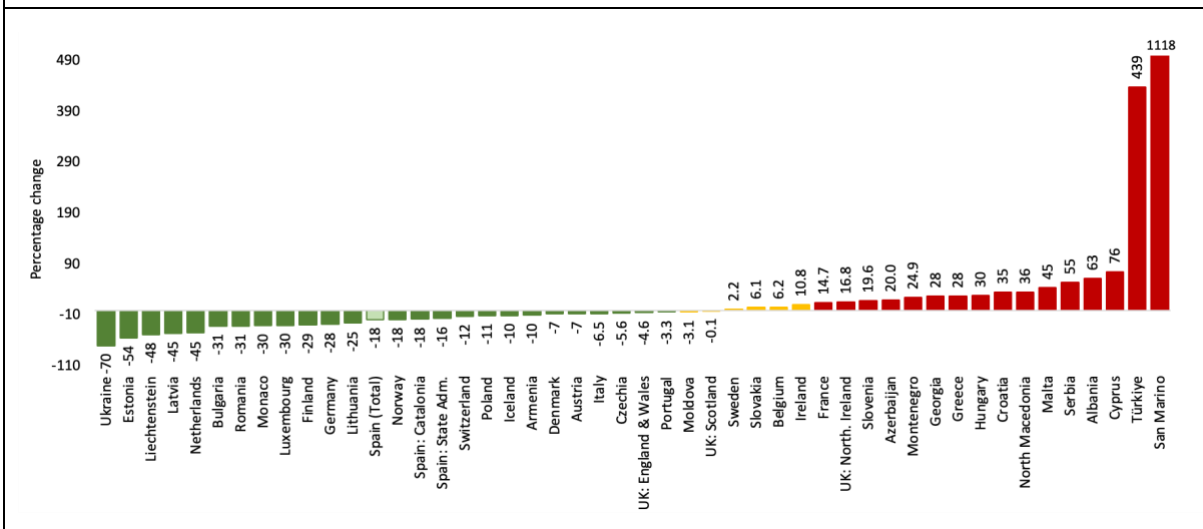
As highlighted in the introduction, the overall upward trajectory aligns with the bounce-back effect from the COVID-19-related lockdowns implemented in 2020. It also contrasts starkly with the overall downward trend observed during the 2010s. Therefore, even though additional year-on-year comparisons are available in Section 5 of this report, we chose to focus this section on the long-term trends registered over nearly twenty years. This approach provides a broader context, facilitating a more comprehensive understanding of the pandemic's impact and the so-called “return to normal.”

In this perspective, Figure 16 presents the average and median prison population rates per 100,000 inhabitants for 48 PAs from 2005 to 2023. The average European prison population rate shows a general decline since 2011. The year 2005 had an average of 128, which rose steadily until it peaked in 2011 at 146. This high was followed

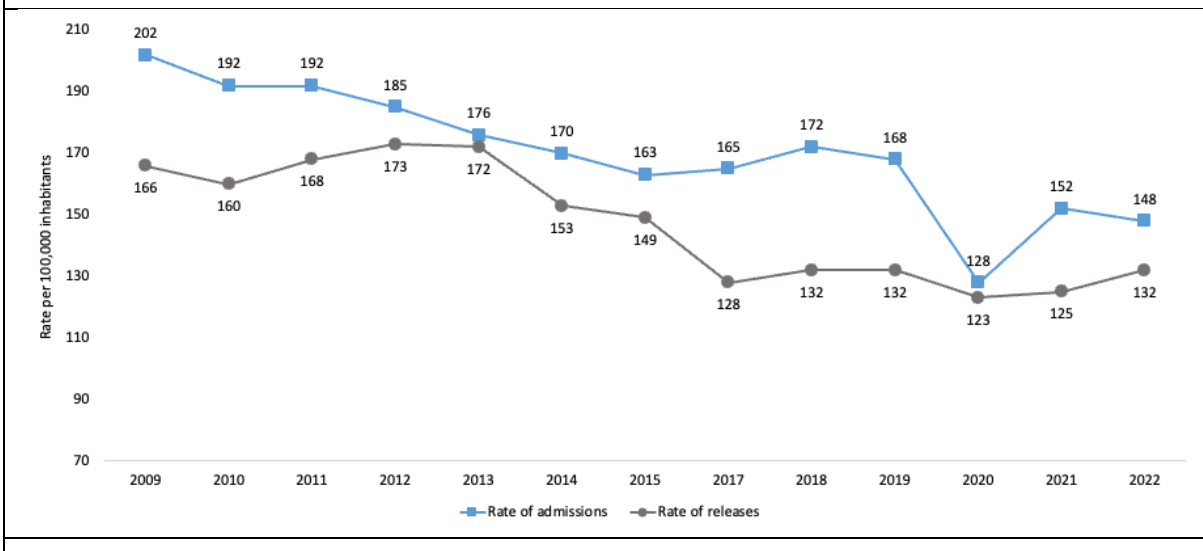
**Figure 16.** Trends in prison population rates from 2005 to 2023 (N=48 PA)



**Figure 17.** Percentage change in prison population rates from 2005 to 2023 (N=47 PA)



**Figure 18.** Trends in admissions and releases rates from 2010 to 2023 (N=31 PA): European average rate



by a steep decline to 134 in 2013. Subsequently, the average rate experienced a slow, somewhat consistent decrease, which intensified slightly in 2020 due to the effects of COVID-19-related lockdowns. The minor increase to 117 in 2022 reflected the return to relative normality—in social life and in the functioning of the criminal justice system—and exemplified the phenomenon known as statistical regression to the mean, often noted by statisticians specialized in the natural, social, or life sciences. However, the rate in 2023 has increased further to 124, suggesting that the trend may not be a mere statistical fluctuation but rather an indication of a real upward trend.

The median rate's trend mirrors that of the average to some extent, albeit with minor deviations. It reached a high in 2013, a year later than the average, at 134 but dropped sharply to 124 in 2014. It then fell to its lowest at 102 in 2020 but, akin to the average, experienced a slight increase to 104 in 2022 due to the same COVID-19-related factors, aligning it with its 2020 level. In 2023, the median rate slightly increased to 106, indicating a continued upward trend, although less steep than the average.

Overall, both average and median rates reveal that over these years, European nations have witnessed a decline in the proportion of their total populations in prison. However, the recent increases suggest that the trend may be reversing. Figure 17, which showcases the percentage change in prison population rates from 2005 to 2023 for 47 PAs, provides further clarity. A slight majority of PAs (23 out of 47) have seen a significant drop in prison population rates, while 19 PAs have recorded a considerable increase. Among countries with populations exceeding one million, Ukraine, Estonia, Latvia, and the Netherlands lead the group with the steepest reductions (-70%, -54%, -45%, and -45%, respectively) although the figures for Ukraine may be misleading due to the ongoing war in the country and its effects both on the overall population of the nation and on its prison population. On the other hand, notable spikes (i.e., more than 50% increase from 2005 to 2023) were observed in Türkiye (439%), Albania (63%), and Serbia (55%).

To conclude, although the majority of the analysed countries experienced a decline in prison population rates between 2005 and 2023, a significant proportion saw increases, sometimes substantial. This diversity likely reflects a complex matrix of societal, economic, legislative, and law enforcement changes over this period. These trends can be compared with admission and release rates from penal institutions—data available from 2009 when SPACE initiated its data collection on releases—as illustrated in Figure 18. Admissions have been on the decline from 2009 to 2022, while releases followed a similar pattern from 2012 to 2017 and seem relatively stable since then. Taking all this information into consideration, a plausible hypothesis—that requires further testing—to explain this combination of trends is that the length of the sentences imposed on prisoners and/or the length of stay in pretrial detention are increasing.

As emphasized in the Introduction, understanding prison population rates and trends requires a nuanced and comprehensive analysis of many potential factors. In that perspective, the downward trend in admissions coincides with a period of decreasing offline traditional crime rates. For instance, in the UK and the USA, offline crime has generally been declining since the early 1990s. In continental Europe, homicide and property offences began to decrease around the same time, but for the rest of the offline offences, the downturn began nearly two decades later in most countries.

Concurrently, it is indisputable that the frequency of online offences, or cybercrimes, has been steadily increasing since the advent of the internet in 1992, and more significantly since the introduction of smartphones in 2007. However, data on these offences is not easily accessible, and although they may currently represent between one-third and half of all offences, inmates convicted for them constitute a minuscule fraction of all inmates. This disparity is not solely attributable to a low clearance rate, but also to the fact that many offenders are convicted for “traditional” offences such as fraud, with an often-overlooked cyber component not reflected in prison statistics.

Additionally, the period of declining prison population rates during the second decade of the 21st Century, coincides with the aftermath of the financial crisis that started in 2008. In that context, criminological theories present conflicting predictions. Marxist criminologists posit that economic crises should trigger an increase in

prison population rates. Conversely, criminologists influenced by opportunity-based theories argue that growing economies create more opportunities, thus increasing crime and, indirectly, prison population rates. This further suggests that economic crises, at least in economically developed countries, diminish opportunities and consequently should result in fewer crimes and a decrease in prison population rates. The data presented in this report leans toward the latter hypothesis. However, rigorous testing of this hypothesis would necessitate more intricate analyses and supplementary data—particularly economic indicators. We are currently looking forward to the data that will be received next year to establish whether the observations in this third decade of the century constitute a trend or a mere fluctuation.



## 5. Overview of the main indicators by country

Table 1 shows the relative position of each European prison administration according to their score in a series of selected indicators. The prison administrations are divided in five clusters according to their score on each of these indicators:

1. **Very high:** This cluster includes the prison administrations whose score is more than 25% higher than the European median value.
2. **High:** This cluster includes the prison administrations whose score is between 5.1% and 25% higher than the European median value.
3. **Close:** This cluster includes the prison administrations whose score is similar (*i.e.*, between -5% and +5%) to the European median value.
4. **Low:** This cluster includes the prison administrations whose score is between 5.1% and 25% lower than the European median value.
5. **Very Low:** This cluster includes the prison administrations whose score is more than 25% lower than the European median value.

For each indicator, both Tables specify the number of prison administrations (PA) for which data are available (e.g. the prison population rate is available for 48 PA, but the percentage of foreign inmates is available only for 46 of them). This is due to the fact that there are countries that did not provide data for every indicator. Three countries (Bosnia and Herzegovina, Spain and the United Kingdom) have more than one prison administration. Consequently, each prison administration is mentioned separately in Table 1, except when all of them are in the same cluster. In this case, only the name of the country is mentioned.

**Table 1.** Ranking of countries according to the main prison indicators, 2023 and 2022.<sup>25</sup>

	Very high (the score is more than 25% higher than the European median value)	High (the score is between 5.1% and 25% higher than the European median value)	Medium (the score is close to the European median value, i.e. between -5% and +5%)	Low (the score is between 5.1% and 25% lower than the European median value)	Very low (the score is more than 25% lower than the European median value)	No data available
<b>STOCK indicators on 31 January 2023</b>						
<b>Prison population rate per 100,000 inhabitants (48 PA)</b>	Türkiye, Georgia, Azerbaijan, Moldova, Hungary, Poland, Slovakia, Albania, Czechia, Lithuania, Latvia, Montenegro, Serbia, Estonia, North Macedonia, UK: England & Wales, UK: Scotland.	Romania, Spain (State Adm.), Portugal (Spain Total), Ukraine.	Cyprus, Malta, Luxembourg, Croatia, France.	Bulgaria, Greece, Austria, Spain (Catalonia), Italy, Belgium, UK: Northern Ireland, Ireland, Sweden.	Armenia, Andorra, Switzerland, Monaco, Denmark, Germany, Slovenia, Norway, Netherlands, Finland, San Marino, Iceland, Liechtenstein,	BiH: State level, Fed. of BiH and Republika Srpska.
<i>N</i>	17	4	5	9	13	
<b>% of female inmates in the prison population (48 PA)</b>	Andorra, Iceland, Cyprus, Malta, Czechia, Finland, Latvia, Hungary, Slovakia, Spain (State Adm.), Portugal, San Marino, Spain (Total), Austria, Norway, Sweden.	Spain (Catalonia), Switzerland, Germany, Luxembourg, Slovenia, Croatia, Moldova, Denmark, Ukraine.	Greece, Estonia, UK: Northern Ireland, Poland.	Ireland, Netherlands, Belgium, Romania, Italy, Lithuania, Serbia, Türkiye, UK: Scotland, UK: England & Wales.	North Macedonia, Bulgaria, Montenegro, Georgia, France, Azerbaijan, Armenia, Albania, Liechtenstein, Monaco.	BiH: State level, Fed. of BiH and Republika Srpska.
<i>N</i>	15	9	4	10	10	
<b>% of foreign inmates in the prison population (46 PA)</b>	Monaco, Liechtenstein, Luxembourg, San Marino, Switzerland, Andorra, Greece, Cyprus, Austria, Malta, Belgium, Iceland, Germany, Slovenia, Estonia, Italy, Spain, Denmark, Norway, France, Netherlands.		Finland.	Portugal, Ireland, Montenegro, Hungary.	UK: England & Wales, UK: Northern Ireland, Croatia, Czechia, North Macedonia, Georgia, Armenia, Türkiye, Serbia, Slovakia, Bulgaria, Lithuania, Albania, Poland, Latvia, Ukraine, Azerbaijan, Moldova, Romania.	BiH: State level, Fed. of BiH and Republika Srpska, Sweden, UK: Scotland.
<i>N</i>	22	0	1	4	19	
<b>% of inmates aged 50 or over in the prison population (42 PA)</b>	Liechtenstein, Italy, Monaco, Slovakia, Croatia, Portugal, North Macedonia, Montenegro, Spain (State Adm.), Spain (Total).	Norway, Estonia, Latvia, Greece, Spain (Catalonia), Serbia, Georgia.	Hungary, UK: Scotland, Romania, Lithuania, Netherlands, Iceland, Poland, Belgium, Albania, Czechia, Slovenia, UK: Northern Ireland, Malta.	Austria, Ireland, Germany, Bulgaria, Andorra, Luxembourg, Türkiye, Cyprus, Finland.	France, Denmark, Sweden, San Marino.	Armenia, Azerbaijan, BiH: State level, Fed. of BiH and Republika Srpska, Moldova, Switzerland, Ukraine, UK: England & Wales.
<i>N</i>	9	7	13	9	4	
<b>% of inmates not serving a final sentence in the prison population (47 PA)</b>	San Marino, Liechtenstein, Albania, Armenia, Luxembourg, Monaco, Switzerland, Netherlands, Montenegro, UK: Northern Ireland, Malta, Denmark, Croatia, Belgium, Ukraine, Cyprus.	Iceland, Andorra, UK: Scotland, Slovenia, Italy, Sweden, France.	Greece, Hungary.	Finland, Latvia, Azerbaijan, Norway, Bulgaria, Ireland, Serbia, Georgia, Austria, Germany, Portugal, Spain (Catalonia).	UK: England & Wales, Moldova, Estonia, Spain (Total), Spain (State Adm.), Slovakia, North Macedonia, Romania, Poland, Lithuania, Czechia.	BiH: State level, Fed. of BiH and Republika Srpska, Türkiye.

<sup>25</sup> Inside each cell of Table B, countries are ranked in descending order according to their rate or percentage in the corresponding variable. For example, in the first cell, Türkiye is presented first because it has the highest prison population rate (355.2 per 100,000 inhabitants), followed by the Georgia (236.6 per 100,000 inhabitants), Azerbaijan (216.8 per 100,000 inhabitants), and so on.

	Very high (the score is more than 25% higher than the European median value)	High (the score is between 5.1% and 25% higher than the European median value)	Medium (the score is close to the European median value, i.e. between -5% and +5%)	Low (the score is between 5.1% and 25% lower than the European median value)	Very low (the score is more than 25% lower than the European median value)	No data available
<i>N</i>	16	7	2	12	10	
<b>Prison density per 100 places (45 PA)</b>	Cyprus, Romania, France, San Marino, Belgium.	Hungary, Italy, Slovenia, Greece, Sweden, North Macedonia, Croatia, Türkiye, Ireland, Portugal, Finland, Denmark, UK: England & Wales, Azerbaijan.	UK: Scotland, Czechia, Moldova, Serbia, Netherlands, Switzerland, Albania.	Slovakia, UK: Northern Ireland, Poland, Georgia, Germany, Norway, Iceland, Spain (Catalonia), Montenegro, Luxembourg, Lithuania, Bulgaria.	Estonia, Spain (Total), Spain (State Adm.), Armenia, Ukraine, Andorra, Liechtenstein, Monaco.	Austria, BiH: State level, Fed. of BiH and Republika Srpska, Latvia, Malta.
<i>N</i>	5	14	7	12	7	
<b>Ratio of inmates per one staff member (47 PA)</b>	Türkiye, Georgia, North Macedonia, Cyprus, Serbia, Poland, Greece, Moldova, Spain (State Adm.), San Marino, Hungary, Spain (Total), Austria, Montenegro, Portugal.	Bulgaria, Czechia, Estonia, Romania, France, Slovakia, Croatia, Lithuania, Slovenia.	Spain (Catalonia), Ukraine, Switzerland, UK: Scotland.	Germany, Belgium, Finland, Italy, Latvia, UK: England & Wales, Armenia, Malta.	Albania, Ireland, UK: Northern Ireland, Denmark, Iceland, Luxembourg, Netherlands, Sweden, Andorra, Norway, Liechtenstein, Monaco.	Azerbaijan, BiH: State level, Fed. of BiH and Republika Srpska.
<i>N</i>	14	9	4	8	12	

\*When the table only indicates « Spain » it means that the classification is the same for Spain (State Administration), Spain (Catalonia) and Spain (total).

	Very high (the score is more than 25% higher than the European median value)	High (the score is between 5.1% and 25% higher than the European median value)	Medium (the score is close to the European median value, i.e. between -5% and +5%)	Low (the score is between 5.1% and 25% lower than the European median value)	Very low (the score is more than 25% lower than the European median value)	No data available
<b>FLOW indicators for the year 2022</b>						
<b>Rate of admissions per 100,000 habitants in 2022 (47 PA)</b>	North Macedonia, Türkiye, Switzerland, Montenegro, Luxembourg, Serbia, Cyprus, Croatia, Poland, Andorra, Georgia, UK: Northern Ireland, Hungary, UK: England and Wales, Sweden, UK: Scotland, Monaco, Germany, Bulgaria.	Belgium, Denmark, Netherlands.	Albania, Slovakia, Ireland.	Malta, Moldova, France, Azerbaijan, Finland.	Austria, Norway, Lithuania, Slovenia, Czechia, Estonia, Spain, Iceland, Greece, Italy, Romania, Ukraine, Armenia, Portugal, San Marino, Liechtenstein.	BiH: State level, Fed. of BiH and Republika Srpska, Latvia.
<i>N</i>	19	3	3	5	17	
<b>Rate of releases per 100,000 habitants in 2022 (46 PA)</b>	Türkiye, Montenegro, Serbia, Poland, Georgia, Croatia, UK: Northern Ireland, Hungary, Andorra, UK: Scotland, Germany, Sweden.	Lithuania, Bulgaria, Belgium, Netherlands, Monaco.	Albania, Cyprus, Liechtenstein.	Moldova, Ireland, Malta, North, Macedonia, Luxembourg, Slovakia, Slovenia.	Finland, Estonia, France, Norway, Austria, Czechia, Azerbaijan, UK: England and Wales, Iceland, Denmark, Spain, Italy, Greece, Romania, Ukraine, Armenia, San Marino, Portugal.	BiH: State level, Fed. of BiH and Republika Srpska, Latvia, Switzerland.
<i>N</i>	12	5	3	7	19	
<b>Suicide rate per 10,000 inmates in 2022 (46 PA)</b>	Latvia, Switzerland, France UK: Scotland, Italy, Belgium, Luxembourg, Slovenia, Finland, Armenia, Lithuania, Portugal, Montenegro, Czechia, UK: England and Wales, Greece, Spain, Croatia, Sweden, Moldova.	Netherlands.	Austria, Slovakia.	Estonia, Ukraine, Albania.	North Macedonia, Serbia, Hungary, Georgia, Romania, Denmark, Ireland, Poland, Türkiye, Azerbaijan, Andorra, Bulgaria, Cyprus, Iceland, Liechtenstein, Malta, Monaco, San Marino, UK: Northern Ireland	BiH: State level, Fed. of BiH and Republika Srpska, Germany, Norway.
<i>N</i>	21	1	3	3	19	
<b>Rate of escapes per 10,000 inmates in 2022 (46 PA)</b>	[Switzerland], North Macedonia, Finland, Sweden, Austria, France, Denmark, Norway, Slovenia, Lithuania, Luxembourg, Belgium Italy, Spain, Greece, Croatia, Armenia, Portugal, Estonia, Ireland, Ukraine.		Slovakia, Serbia.	Moldova.	Netherlands, UK: England and Wales, Romania, Hungary Türkiye, Albania, Andorra, Azerbaijan, Cyprus, Czechia, Georgia, Iceland, Latvia, Liechtenstein, Malta, Monaco, Montenegro, Poland, San Marino, UK: Northern Ireland, UK: Scotland.	BiH: State level, Fed. of BiH and Republika Srpska, Bulgaria, Germany.
<i>N</i>	22	0	3	1	21	
<b>Average length of imprisonment, in months [based on the stock and flow] (46 PA)</b>	Portugal, Azerbaijan, Ukraine, Moldova, Romania, Czechia, Lithuania, San Marino, Greece, Armenia Italy, Slovakia, Albania, Georgia.	San Marino, Austria, Hungary, France, Malta.	Liechtenstein, Poland, Türkiye.	UK: Scotland, UK: England and Wales, Slovenia.	Ireland, Bulgaria, Serbia, Belgium, Norway, Iceland, Finland, Montenegro, Croatia, Denmark, Sweden, UK: Northern Ireland, Monaco, Germany, Netherlands, Andorra, Luxembourg, North Macedonia, Switzerland.	BiH: State level, Fed. of BiH and Republika Srpska, Cyprus, Latvia.
<i>N</i>	16	5	3	3	19	

\*When the table only indicates « Spain » it means that the classification is the same for Spain (State Administration), Spain (Catalonia) and Spain (total).

## 6. Annual variation in the median rates of stock (2022-23) and flow (2021-22) indicators

Table 2 presents the year-on-year variations of both stock indicators (comparing 2022 to 2023) and flow indicators (comparing 2021 to 2022). These comparisons are limited to PAs of countries with over one million inhabitants and that provided data for the trend analysis (see Section 4 of this report). As such, the figures displayed in this Table may not align perfectly with those contained in the SPACE I report or other sections of this document. For instance, while the current SPACE I report includes data on both admissions and releases across 47 PAs in 2022 (see Figure 11 above), only 40 of these have been providing the relevant data since 2005 and are in countries with populations exceeding one million. Consequently, comparisons are only feasible for these 40 PAs. The total number of PAs contributing data for both years is indicated within brackets beside each indicator.

**Table 2.** Annual variations in the median rates of stock (2022 to 2023) and flow (2020 to 2022) indicators in PAs of countries with over one million inhabitants and data for the trend analysis of Section 4

	2022	2023	% change 2022-2023
<b>Stock indicators</b>			
Prison population rate per 100,000 inhabitants (39 PA)	113.5	116.2	2.4
% of female inmates in the prison population (39 PA)	4.7	4.9	4.5
% of foreign inmates in the prison population (36 PA)	12.4	14.2	14.3
<i>Of which:</i> % of foreign inmates from EU countries (33 PA)	26.1	23.5	-10.0
% of inmates not serving a final sentence in the prison populations (38 PA)	23.7	22.1	-7.0
Prison density per 100 places (37 PA)	91.7	93.5	2.0
Number of overcrowded prison administrations (more than 100 inmates per 100 places) (37 PA)	9	11	22.2
Ratio of inmates per one staff member (36 PA)	1.45	1.56	7.6
Ratio of inmates per custodian solely dedicated to custody (31 PA)	3.2	3.3	3.1
<b>Sentenced prisoners by offence</b>			
% of prisoners sentenced for drug offences (33 PA)	18.2	18.5	1.6
% of prisoners sentenced for theft (34 PA)	11.6	11.7	1.2
% of prisoners sentenced for homicide (34 PA)	13.5	12.7	-6.0
<b>Sentenced prisoners by length of sentence imposed</b>			
% of prisoners sentenced to less than one year (36 PA)	11.6	12.7	9.9
% of prisoners sentenced from 1 to less than 3 years (32 PA)	24.5	24.2	-1.0
% of prisoners sentenced from 3 to less than 5 years (34 PA)	18.25	17.79	-2.5
% of prisoners sentenced from 5 to less than 10 years (33 PA)	23.1	21.2	-4.6
	<b>2021</b>	<b>2022</b>	<b>% change 2020-2022</b>
<b>Flow indicators</b>			
Rate of admissions per 100,000 inhabitants (37 PA)	141.6	140.4	-0.9
Rate of releases per 100,000 inhabitants (37 PA)	96.4	109.4	13.5
Average length of imprisonment in months (based on the stock and flow) (37 PA)	10.4	10.1	-2.5
<b>Cost indicator</b>			
Total budget spent by the prison administrations (36 PA)	20 026 990 495.50 €	22 161 186 097.70€	10.7

**Notes:**

PA: Prison administration.

The number between brackets indicates the number of PAs that provided data for both years.

Considering that increases up to +5% or decreases up to -5% reflect stability, the annual variations observed at the *European level* are summarised below.

The following indicators *remained relatively stable*:

- Prison population rate per 100,000 inhabitants (2.4%)
- % of female inmates in the prison population (4.5%)
- Prison density per 100 places (2.0%)
- Ratio of inmates per custodian solely dedicated to custody (3.1%)
- % of prisoners sentenced for drug offences (1.6%)
- % of prisoners sentenced for theft (1.2%)
- % of prisoners sentenced for homicide (-6.0%)
- % of prisoners sentenced from 1 to less than 3 years (-1.0%)
- % of prisoners sentenced from 3 to less than 5 years (-2.5%)
- % of prisoners sentenced from 5 to less than 10 years (-4.6%)
- Rate of admissions per 100,000 inhabitants (-0.9%)
- Average length of imprisonment in months (based on the stock and flow) (-2.5%)

The following indicators registered a *decrease*:

- % of prisoners sentenced for homicide (-6.0%)
- % of foreign inmates from EU countries based on the total number of foreign inmates (-10.0%)
- % of inmates not serving a final sentence in the prison populations (-7.0%)

Finally, the following indicators that registered an *increase*:

- % of foreign inmates in the prison population (14.3%)
- Number of overcrowded prison administrations (more than 100 inmates per 100 places) (22.2%)
- Ratio of inmates per one staff member (7.6%)
- % of prisoners sentenced to less than one year (9.9%)
- Rate of releases per 100,000 inhabitants (13.5%)
- Total budget spent by the prison administrations (10.7%)



## 7. Tables

**Table 3.** Stock indicators on 31 January 2023

Country	Total number of inmates (including pre-trial detainees)	Prison population rate per 100,000 inhabitants	% of female inmates in the prison pop.	% of foreign inmates in the prison pop.	% of inmates aged between 50 and 64 in the prison pop.	% of inmates aged 65 or over in the prison pop.	% of inmates without a final sentence in the prison pop.	% of prisoners sentenced for homicide (including attempts)	% of prisoners sentenced for theft	% of prisoners sentenced for drug offences	% of prisoners sentenced from 1 to less than 3 years	% of prisoners sentenced from 3 to less than 5 years	% of prisoners sentenced from 5 to less than 10 years	Prison density per 100 places	Ratio of inmates per one staff member
Albania	4 931	178.5	1.3	2.8	12.1	4.7	54.7	31.4	7.7	24.3	9.4	17.4	22.0	87.2	1.1
Andorra	61	74.8	11.5	60.7	9.8	4.9	29.5	7.1	0.0	14.3	9.5	19.0	9.5	41.2	0.7
Armenia	2 357	79.2	2.6	6.2			53.3							52.5	1.2
Austria	9 088	99.8	6.6	51.3	13.2	2.9	21.2				29.6	15.3	13.1	***	2.1
Azerbaijan	24 698	243.9	2.9	1.9			22.5	12.6	11.5	41.7	***	***	***	96.2	***
Belgium	11 196	95.3	4.5	41.5	14.3	2.7	36.2	15.4	44.3	28.9	6.0	23.7	32.4	115.3	1.3
BH: BiH (total)															
BH: Rep. Srpska															
Bulgaria	6 501	100.8	3.6	3.9	14.5	1.0	21.5	16.4	3.4	11.9	26.8	13.0	12.7	68.5	1.8
Croatia	4 091	106.2	1.9	10.5	14.7	10.3	36.4	13.5	18.9	9.2	29.8	15.7	15.0	101.0	1.6
Cyprus	1 026	111.4	9.2	55.2	11.5	3.0	31.3	9.2	14.8	20.7	24.5	14.6	19.4	165.5	2.6
Czechia	19 052	176.0	8.5	7.7	14.7	2.0	7.5	***	***	***	37.2	16.1	14.5	93.5	1.8
Denmark	4 230	71.3	5.3	29.0	11.1	1.3	38.8	6.7	6.0	27.4	27.2	14.8	20.7	96.9	1.0
Estonia	2 056	150.5	4.9	32.8	18.1	3.1	16.8	15.4	9.3	24.1	27.9	20.2	28.6	67.6	1.8
Finland	2 912	52.3	7.7	16.9	12.3	1.7	22.8	20.5	5.4	20.5	26.7	21.0	15.6	97.2	1.3
France	72 294	106.2	3.2	25.1	10.4	2.4	26.8	9.0	13.9	12.8	37.4	14.4	11.9	119.2	1.7
Georgia	9 568	256.1	3.4	6.7	16.1	2.1	20.2	13.7	20.6	23.1	20.5	20.3	39.6	82.1	2.7
Germany	58 098	68.9	5.7	38.2	14.7	1.0	20.2	8.3	18.8	14.0	***	***	***	80.1	1.4
Greece	10 465	100.7	5.0	56.8	16.8	3.0	24.7	11.1	14.0	21.0	***	***	36.5	102.9	2.4
Hungary	20 221	210.7	7.4	14.2	16.1	2.1	24.5	8.4	17.3	7.3	34.3	20.6	24.2	111.5	2.2
Iceland	141	36.4	9.9	39.7	14.9	2.1	30.5	13.3	4.1	34.7	35.7	20.4	14.3	77.9	0.9
Ireland	4 432	85.3	4.7	14.6	12.8	3.3	20.6	12.4	16.1	11.7	27.2	20.2	22.6	99.4	1.1
Italy	56 127	95.4	4.3	31.5	24.1	5.0	27.6	17.1	5.6	31.4	16.7	21.8	29.6	109.2	1.4
Latvia	3 229	171.5	7.7	2.4	15.4	4.7	22.7	21.4	44.2	41.8	17.5	17.7	28.4	***	1.3
Liechtenstein	6	15.1	0.0	83.3	16.7	16.7	83.3	0.0	0.0	0.0	100.0	0.0	0.0	30.0	0.3
Lithuania	4 973	174.0	4.3	3.3	12.6	5.0	11.2	26.8	11.9	18.5	20.2	14.3	23.2	69.1	1.6
Luxembourg	705	106.7	5.5	77.7	12.8	2.0	48.9	16.4	25.0	13.9	42.2	9.2	15.0	70.9	0.9

Country	Total number of inmates (including pre-trial detainees)	Prison population rate per 100,000 inhabitants	% of female inmates in the prison pop.	% of foreign inmates in the prison pop.	% of inmates aged between 50 and 64 in the prison pop.	% of inmates aged 65 or over in the prison pop.	% of inmates without a final sentence in the prison pop.	% of prisoners sentenced for homicide (including attempts)	% of prisoners sentenced for theft	% of prisoners sentenced for drug offences	% of prisoners sentenced from 1 to less than 3 years	% of prisoners sentenced from 3 to less than 5 years	% of prisoners sentenced from 5 to less than 10 years	Prison density per 100 places	Ratio of inmates per one staff member
Malta	581	107.2	9.1	48.5	13.8	2.6	39.1	16.2	5.0	24.5	36.5	32.8	28.2	***	1.2
Moldova	6 079	241.9	5.4	1.5	***	***	17.1	22.1	9.1	9.1	9.4	15.3	34.8	90.3	2.4
Monaco	26	71.6	0.0	88.5	15.4	11.5	46.2	20.0	33.3	26.7	40.0	6.7	0.0	26.5	0.3
Montenegro	1 036	168.0	3.5	14.5	20.2	3.4	42.1	10.7	8.0	21.2	23.2	12.2	5.8	77.7	2.1
Netherlands	9 334	52.4	4.6	24.2	15.1	2.3	44.6	16.9	12.6	18.5	25.4	11.2	12.2	89.9	0.8
North Macedonia	2 606	142.4	3.7	7.4	21.0	2.7	12.3	10.8	14.7	23.0	22.1	21.5	24.2	101.3	2.7
Norway	3 029	55.2	6.3	26.5	18.5	3.0	21.6	10.0	3.2	20.5	26.0	18.7	21.5	80.0	0.7
Poland	71 228	193.8	4.8	2.6	14.4	2.5	11.4	7.1	0.9	***	29.1	12.8	11.1	83.1	2.5
Portugal	12 383	118.3	7.2	15.3	20.9	4.0	19.9	9.3	11.5	18.5	15.4	19.2	36.2	98.1	1.9
Romania	23 040	120.9	4.4	1.1	15.3	2.6	12.1	24.9	19.8	6.9	22.4	29.4	24.5	120.3	1.8
San Marino	14	41.4	7.1	71.4	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	116.7	2.3
Serbia	10 787	161.9	4.2	4.1	17.8	1.3	20.4	12.8	22.7	28.5	27.9	24.7	19.3	90.2	2.6
Slovak Rep.	9 939	183.1	7.2	4.1	23.9	2.6	14.6	7.1	8.8	16.7	24.7	16.4	25.7	85.3	1.7
Slovenia	1 435	67.8	5.5	34.0	11.9	4.8	28.2	9.3	23.3	14.3	43.0	17.9	10.7	106.7	1.6
Spain (Total)	55 909	116.3	7.0	30.1	19.3	3.2	16.4	7.8	4.4	16.1	20.1	20.0	25.0	61.6	2.2
Spain: State Admin.	48 180	120.0	7.2	27.1	19.7	3.2	15.9	7.4	2.2	16.6	20.7	20.0	24.4	59.6	2.4
Spain: Catalonia	7 729	97.8	6.0	48.7	16.4	3.2	19.5	9.9	18.9	13.2	16.5	20.3	29.1	77.9	1.5
Sweden	8 414	80.0	6.3	***	10.3	2.1	27.0	14.9	4.9	24.7	33.7	21.7	19.3	102.0	0.8
Switzerland	6 445	73.1	5.9	71.0	***	***	45.8	14.5	21.8	19.5	15.0	18.0	9.4	89.6	1.4
Türkiye	348 265	408.4	4.1	4.4	13.0	1.7	***	12.4	28.3	34.4	11.2	10.6	21.4	100.0	4.5
Ukraine	42 708	116.2	5.3	2.1	***	***	35.9	19.1	33.3	12.1	***	39.0	***	48.0	1.5
UK: England & Wales	81 806	136.2	3.8	12.0			17.3	11.4	9.1	16.2	0.0	0.0	17.8	96.8	1.3
UK: Northern Ireland	1 750	90.5	4.9	11.3	13.1	3.6	41.2	15.6	8.7	7.9	23.7	14.0	15.3	84.5	1.1
UK: Scotland	7 408	133.2	4.0	***	14.6	3.4	28.9	15.3	4.2	6.1	21.1	15.5	25.9	93.6	1.4
<b>Average</b>		<b>123.9</b>	<b>5.2</b>	<b>26.8</b>	<b>14.9</b>	<b>3.5</b>	<b>30.1</b>	<b>13.4</b>	<b>13.7</b>	<b>18.9</b>	<b>25.4</b>	<b>17.0</b>	<b>19.7</b>	<b>87.8</b>	<b>1.6</b>
<b>Median</b>		<b>106.5</b>	<b>5.0</b>	<b>16.1</b>	<b>14.7</b>	<b>2.8</b>	<b>24.7</b>	<b>12.8</b>	<b>11.5</b>	<b>18.5</b>	<b>24.7</b>	<b>17.5</b>	<b>20.1</b>	<b>90.2</b>	<b>1.5</b>
<b>Minimum</b>		<b>15.1</b>	<b>0.0</b>	<b>1.1</b>	<b>0.0</b>	<b>0.0</b>	<b>7.5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>26.5</b>	<b>0.3</b>
<b>Maximum</b>		<b>408.4</b>	<b>11.5</b>	<b>88.5</b>	<b>24.1</b>	<b>16.7</b>	<b>100.0</b>	<b>31.4</b>	<b>44.3</b>	<b>41.8</b>	<b>100.0</b>	<b>39.0</b>	<b>39.6</b>	<b>165.5</b>	<b>4.5</b>

**Table 4.** Flow indicators for the year 2022

Country	Rate of admissions per 100,000 inhabitants	Rate of releases per 100,000 inhabitants	Turnover ratio	Suicide rate per 10,000 inmates	Rate of escapes per 10,000 inmates	Average length of imprisonment (based on the stock and the flow)	Total budget spent by the prison administration
Albania	143.4	142.1	43.6	4.1	0.0	15.0	44 027 975.00 €
Andorra	229.2	204.7	70.2	0.0	0.0	3.9	4 057 247.32 €
Armenia	52.8	45.1	36.0	12.7	8.5	18.0	25 499 895.00 €
Austria	102.6	97.9	49.2	5.5	123.2	12	599 800 000.00 €
Azerbaijan	107.6	85.8	25.7	1.6	0.0	27.2	77 990 525.00 €
Belgium	170.0	161.3	61.1	14.3	20.5	6.7	640 409 764.97 €
<i>BH: BiH (total)</i>							
BH: Rep. Srpska							
Bulgaria	175.4	161.5	58.7	0.0	***	6.9	13 910 000.00 €
Croatia	231.7	210.9	63.1	7.3	12.2	5.5	82 253 757.59 €
Cyprus	232.9	140.8	43.8	0.0	0.0	***	28 416 133.00 €
Czechia	96.0	94.2	34.8	9.4	0.0	22	513 402 140.00 €
Denmark	156.6	70.5	30.8	2.4	106.4	5.5	506 236 894.00 €
Estonia	94.0	102.1	40.1	4.9	4.9	19.2	75 849 483.00 €
Finland	107.3	103.9	65.2	13.7	250.7	5.9	225 356 000.00 €
France	112.6	101.0	46.1	19.1	122.7	11.3	3 321 598 635.00 €
Georgia	227.9	219.1	45.7	3.1	0.0	13	53 222 183.70 €
Germany	180.5	186.2	75.3	***	***	4.6	NA
Greece	65.8	65.8	37.9	8.6	14.3	18.4	34 390 007.66 €
Hungary	216.2	207.8	50.4	3.5	0.5	11.7	359 522 698.00 €
Iceland	70.2	73.0	69.9	0.0	0.0	6.2	17 400 000.00 €
Ireland	137.7	126.1	59.4	2.3	4.5	7.4	440 218 000.00 €
Italy	64.8	67.1	42.4	15.0	15.9	17.7	3 288 917 585.32 €
Latvia	***	***	***	21.7	0.0	***	61 794 159.00 €
Liechtenstein	17.6	131.1	273.7	0.0	0.0	10.3	1 156 732.00 €
Lithuania	101.8	164.8	58.3	12.1	42.2	20.5	82 318 700.00 €
Luxembourg	348.1	118.2	26.5	14.2	28.4	3.7	92 755 732.82 €
Malta	119.9	123.4	53.0	0.0	0.0	10.7	28 832 675.00 €
Moldova	114.9	127.8	34.5	6.6	1.7	25.3	33 117 349.40 €
Monaco	184.6	148.8	66.7	0.0	0.0	4.7	5 277 485.00 €
Montenegro	348.6	324.5	64.6	9.7	0.0	5.8	10 581 313.43 €
Netherlands	149.9	150.3	74.4	6.4	1.1	4.2	881 176 000.00 €
North Macedonia	579.5	124.2	16.9	3.8	310.8	3.0	22 818 148.00 €
Norway	102.1	98.4	62.0	***	62.7	6.5	418 781 524.00 €
Poland	229.5	231.4	54.4	2.0	0.0	10	906 955 875.85 €
Portugal	47.1	40.2	25.0	11.3	6.5	30.2	NA
Romania	60.4	60.2	33.0	3.0	0.9	24.0	348 746 429.63 €
San Marino	41.4	41.4	100.0	0.0	0.0	12.0	191 218.83 €
Serbia	287.5	282.4	63.1	3.7	1.9	6.8	127 887 052.00 €
Slovak Rep.	140.4	110.0	33.4	5.0	2.0	15.7	244 438 204.00 €
Slovenia	100.2	105.7	63.6	13.9	48.8	8.1	54 718 459.56 €
Spain (Total)	72.3	67.9	36.0	8.6	15.7	19	1 243 380 704.00 €
Spain: State Admin.	73.0	68.3	35.4	7.3	17.4	19.7	697 376 606.00 €
Spain: Catalonia	68.7	66.1	39.7	16.8	5.2	17.1	546 004 098.00 €
Sweden	191.1	184.1	68.8	7.1	222.3	5.0	932 072 387.00 €
Switzerland	421.3	***	***	20.2	443.8	2.1	NA
Türkiye	490.0	426.0	50.3	1.8	0.2	10.0	811 087 794.67 €
Ukraine	53.4	53.4	28.5	4.9	4.0	26.1	219 900 000.00 €
UK: England & Wales	192.8	78.5	24.0	9.3	1.0	8.5	4 882 819 560.00 €
UK: Northern Ireland	223.5	209.3	68.2	0.0	0.0	4.9	161 768 206.39 €
UK: Scotland	186.8	191.0	59.1	18.9	0.0	8.6	424 800 000.00 €
<b>Average</b>	<b>167.0</b>	<b>137.5</b>	<b>54.9</b>	<b>7.1</b>	<b>41.0</b>	<b>11.8</b>	
<b>Median</b>	<b>140.4</b>	<b>123.8</b>	<b>50.4</b>	<b>5.3</b>	<b>1.9</b>	<b>10.1</b>	
<b>Minimum</b>	<b>17.6</b>	<b>40.2</b>	<b>16.9</b>	<b>0.0</b>	<b>0.0</b>	<b>2.1</b>	
<b>Maximum</b>	<b>579.5</b>	<b>426.0</b>	<b>273.7</b>	<b>21.7</b>	<b>443.8</b>	<b>30.2</b>	

## 8. Methodology

This document uses European *average* and *median* rates. The median is the value that divides the data in two equal groups so that 50% of the countries are above the median and 50% are below it. The median is preferred to the *arithmetic mean* (commonly referred to as the *average*) because the latter is extremely sensitive to very high or very low values (technically known as *outliers*), which entail unreliable indicators. Outliers are quite common in the sample of countries included in the SPACE report because some member states, like Andorra, Liechtenstein, Monaco, or San Marino, have a very small population and, as a consequence, a change in only one person can have a big impact on its percentages, rates, and trends. That is why the comments focus only on countries with populations exceeding one million.

For example, San Marino only had 1 inmate on 31 January 2019, and that person was a national citizen who had received a final sentence. This corresponds to percentages of 100% for national inmates and 100% for sentenced inmates; but the addition of only one inmate could decrease these percentages by 50% (if the additional inmate was a foreign citizen not serving a final sentence). Conversely, as San Marino has a population of 34,590 inhabitants, its prison population rate corresponds to 2.9 inmates per 100,000 inhabitants (*i.e.*, it is higher than the real number of inmates and inhabitants), but the addition of only one inmate would increase it to 5.8 per 100,000 inhabitants. This problem is particularly relevant in a longitudinal perspective (*i.e.*, when establishing time series or trends), because if a similar increase (in one inmate) takes place from one year to the other, it would represent a growth of 100% of the prison population. In addition, when calculating indicators for the continent, the inclusion of a percentage of 100% for one country artificially increases the European average for the indicator being measured. Something similar happens with other indicators such as the rate of escapes, which in the case of San Marino reached in 2019 the absurd number of 20,000 escapes per 10,000 inmates because there was one person deprived of freedom on 31 January 2019, but two had escaped during 2018.

The European average and median rates are weighted according to the population and the number of inmates in each country. This means that they are estimated on the basis of the percentages and rates per 100,000 inhabitants of each country and not on the absolute numbers for the whole continent. Using the latter would produce different values, which could hide the diversity observed across countries. For example, on 31 January 2023, there were 1,034,876 inmates in the penal institutions of the 48 PA of the Council of Europe member states whose data on prison population rates are presented in the 2023 SPACE I report. At the same time, the total population of the territories in which these PA are located was 684 million inhabitants, which would lead to a prison population rate of 151 inmates per 100,000 inhabitants. However, when the European median value is weighted on the basis of the population and the number of inmates of each country (*i.e.*, on the basis of the prison population rate of each country), it corresponds to 106 inmates per 100,000 inhabitants, as stated at the beginning of this document.

To facilitate the reading, all values equal or superior to 10 are in principle presented in round numbers (*i.e.*, without decimals), while those inferior to 10 are presented with one decimal. The percentage changes, however, are estimated using all decimals, which may explain slight differences if the reader calculates on its own those percentages using the figures without decimals included in this publication. The original figures, with decimals, can be found in the 2023 SPACE I report.

To avoid duplication of data, the total for the whole territory of Spain (which corresponds to the addition of the data for the State Central Administration and the Catalan Administration) is not included in the computation of the average and median European values.<sup>26</sup>

---

<sup>26</sup> Two questionnaires were received from Spain, one for the PA of the Autonomous Community of Catalonia and one for the State PA. In the latter, most items refer to the whole territory of Spain, but some do not include Catalonia. Therefore, and as it has been done since the mid-2000s, we have estimated the indicators for three entities: Catalonia, the whole country, and the latter without the inmates under the authority of the Catalan PA.

In the case when data validation procedure revealed inconsistencies that cannot be explained, these figures are presented between brackets and are not considered in the calculation of European average and median values.

Since the 2018 SPACE I report, the date of reference for stock indicators refers to 31 January of the year preceding the publication instead of 1 September of the year before that one, as it was the case from 1983 to 2016. The aim of that change of date is to publish the latest available data. This means that there are no data available for 31 January 2017, although the data on 1 September 2016 could be considered as an acceptable proxy of the situation on 31 January 2017. In the case of flow indicators, the consequence of the change of date is that there are no data available for the year 2016. Researchers interested in establishing time series can interpolate the value for 2016 on the basis of those observed in 2015 and 2017.

---